

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01000

GENERAL REQUIREMENTS

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SIGNS
 - 1.2.1 General
 - 1.2.2 Construction
 - 1.2.3 Maintenance and Disposal
- 1.3 BULLETIN BOARD
 - 1.3.1 Maintenance and Disposal
- 1.4 SCRAP MATERIAL
- 1.5 WRITTEN GUARANTEES AND GRANTOR'S LOCAL REPRESENTATIVE
- 1.6 PRICING OF CONTRACTOR-FURNISHED AND INSTALLED PROPERTY AND GOVERNMENT FURNISHED CONTRACTOR-INSTALLED PROPERTY
- 1.7 TEMPORARY ELECTRIC WIRING
 - 1.7.1 Temporary Power and Lighting
 - 1.7.2 Construction Equipment
- 1.8 UTILITIES NOT SHOWN
- 1.9 GENERAL SAFETY REQUIREMENTS
 - 1.9.1 General
 - 1.9.2 The Prime Contractor's Superintendent
 - 1.9.3 Job Hazard Analysis
 - 1.9.4 Violations
 - 1.9.5 Elevated Work Areas
 - 1.9.6 Fire Protection
 - 1.9.7 Recordingkeeping/Reporting Requirements
 - 1.9.8 Accident Reporting
- 1.10 PUBLIC CONVENIENCE AND SAFETY
- 1.11 EXCAVATION PERMITS
- 1.12 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER
- 1.13 HOUSEKEEPING AND CLEANUP
- 1.14 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE
- 1.15 SPECIAL CONSTRUCTION RESTRAINTS/REQUIREMENTS
- 1.16 SOIL DENSITY TEST (USING METERS CONTAINING RADIOACTIVE MATERIALS)
- 1.17 DISPOSAL OF MATERIAL
- 1.18 CONTRACTOR-SAFETY PERSONNEL REQUIREMENTS (1985 JAN HQ USACE)

-- End of Section Table of Contents --

SECTION 01000

GENERAL REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

DEPARTMENT OF COMMERCE (DOC)

DOC PS 1 (1983) Construction and Industrial Plywood

DOC PS 20 (1970) American Softwood Lumber Standard.

FEDERAL SPECIFICATIONS (FS)

FS FF-B-575 (Rev C) Bolts, Hexagon and Square.

FS FF-N-105 (Rev B: Int Am 4) Nails, Brads, Staples
and Spikes: Wire, Cut and Wrought

FEDERAL STANDARDS (FED-STD)

NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA)

U.S. ARMY CORPS OF ENGINEERS

EM 385-1-1 Safety and Health Requirements Manual
(September 1996).

WEST COAST LUMBER INSPECTION BUREAU (WCLIB)

WCLIB 16 (1970: Rev 1983) Standard Grading and
Dressing Rules for Douglas Fir, Western
Hemlock, Western Red Cedar, White Fir,
Sitka Spruce Lumber

WESTERN WOOD PRODUCTS ASSOCIATION (WWPA)

1.2 SIGNS

1.2.1 General

The Contractor shall construct and erect one project sign, one safety sign and a minimum of 2 hard hat signs at locations designated by the Contracting Officer. The sign shall conform to the requirements of the drawings attached at the end of this section. The signs shall be erected as soon as possible and within 15 days after date of Commencement of work under this contract. The data required by the safety sign shall be corrected daily.

- (1) Lumber shall conform to DOC PS 20 and grading rules of applicable grading agencies, WCLIB 16 or WWP-01. Grade shall be "Standard" or better Douglas Fir, S4S and shall be stamped S-Dry.
- (2) Plywood: Plywood shall conform to DOC PS 1, Grade AC, Group 1, Exterior.
- (3) Bolts, Nuts and Nails: Bolts and nuts shall be galvanized and conform to FS FF-B-575 and FS F-N-1 36. Nails shall conform to FS FF-N-105.
- (4) Paint: Type of paint for primer, finish coats, lettering and color of signs and lettering shall be as indicated below. Safety signs shall be painted in the same colors as the project sign. Hard hat decals shall be painted as indicated on the attached drawing.
 - (a) Primer and Finish Coats: Background shall be FED STD 595, Color Number 15090 (blue, gloss).
 - (b) Lettering FED STD 595, Color Number 17875 (White, gloss)
- (5) Decals: Corps of Engineers castle decal and the hard hat decal called for on the signs will be furnished by the Government.

1.2.2 Construction

Signs shall be constructed as detailed on attached drawings. Painting all exposed surfaces and edges of plywood shall be given one coat of linseed oil and be wiped prior to applying primer. All exposed surfaces of signs and Supports shall be given one coat of primer and one finish coat of paint colors as indicated above. All lettering shall be sized as indicated. Width of letter stroke shall be 1/6 of the letter height, except as noted.

1.2.3 Maintenance and Disposal

The Contractor shall maintain the signs in good condition throughout the life of the project. Signs shall remain the property of the Contractor and upon completion of the project they shall be removed from the site.

1.3 BULLETIN BOARD

A weatherproof bulletin board, not less than 36 inches wide and 30 inches high, with hinged glass door shall be provided adjacent to or mounted on the Contractor's project office. If adjacent to the office, the bulletin board shall be securely mounted on not less than 2 posts. Bulletin board and posts shall be painted or have approved factory finish. The bulletin board shall be easily accessible at all times and shall contain wage rates, equal opportunity notice, and other items required to be posted.

1.3.1 Maintenance and Disposal

The Contractor shall maintain the bulletin board in good condition throughout the life of the project. The bulletin board shall remain the property of the Contractor and upon completion of the project shall be removed from the site.

1.4 SCRAP MATERIAL

Materials specified to be removed and become the property of the Contractor

are designated as scrap, and the Contractor, by signing this contract, hereby acknowledges that he has made due allowance for value, if any, of such scrap in the contract price.

1.5 WRITTEN GUARANTEES AND GRANTOR'S LOCAL REPRESENTATIVE

Prior to completion of the contract, the Contractor shall obtain and furnish to the Contracting Officer's representative written guarantees for all the equipment and/or appliances furnished under the contract. The Contractor shall furnish with each guarantee: The name, address, and telephone number of the guarantor's representative nearest to the location where the equipment and/or appliances are installed, who, upon request of the using service's representative, will honor the guarantee during the guaranty period and will provide the services prescribed by the terms of the guarantee.

1.6 PRICING OF CONTRACTOR-FURNISHED AND INSTALLED PROPERTY AND GOVERNMENT FURNISHED CONTRACTOR-INSTALLED PROPERTY

The Contractor shall promptly furnish and shall cause any subcontractor or supplier to furnish, in like manner, unit prices and descriptive data required by the Government for Property Record purposes of fixtures and equipment furnished and for installed by the Contractor or subcontractor, except prices do not need to be provided for Government-Furnished Property. This information shall be listed on RMS forms furnished by the Government.

1.7 TEMPORARY ELECTRIC WIRING

1.7.1 Temporary Power and Lighting

The Contractor shall provide construction power facilities in accordance with the safety requirements of the National Electrical code NFPA No. 70 and the SAFETY AND HEALTH REQUIREMENTS MANUAL EM 385-1-1. The Contractor, or his delegated subcontractor, shall enforce all the safety requirements of electrical extensions for the work of all subcontractors. All work shall be accomplished by skilled electrical tradesmen in a workmanlike manner, as approved by the Contracting Officer.

1.7.2 Construction Equipment

In addition to the requirements of EM 385-1-1, SAFETY AND HEALTH REQUIREMENTS MANUAL, all temporary wiring conductors installed for operation of construction tools and equipment, shall be either Type TW or TXW contained in metal raceways, or may be multiconductor cord. Temporary wiring shall be scoured above the ground or floor in a workmanlike manner and shall not present an obstacle to persons or equipment. open wiring may only be used outside of buildings, and then only in strict accordance with the provisions of the National Electrical Code.

1.8 UTILITIES NOT SHOWN

If the Contractor encounters, within the construction limits of the entire project, utilities not shown on the plans and not visible as to the date of this contract and Such utilities will interfere with construction operations, he shall immediately notify the Contracting Officer in writing to enable ~ determination by the Contracting Officer as to the necessity for removal or relocation. If such utilities are removed or relocated as directed by the Contracting officer, the Contractor shall be entitled to equitable adjustment for any additional pertinent work or delay.

1.9 GENERAL SAFETY REQUIREMENTS

1.9.1 General

The Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, and the Occupational Safety and Health Act (OSHA) Standards for Construction (Title 29, Code of Federal Regulations Part 1926 as revised from time to time); General Industry Standards (Title 29, Code of Federal Regulations Part 1910 as revised from time to time); and the National Fire Protection Association Codes are applicable to this contract. In case of conflict the most stringent requirement of the standards is applicable.

1.9.2 The Prime Contractor's Superintendent

The prime Contractor's superintendent shall take an active role in enforcing the safety requirements by participation in safety conferences, hazard analysis (see below), tool box meetings, walk-through inspections, correction of violations, etc., and including that of the subcontractors work.

1.9.3 Job Hazard Analysis

Based on the construction schedule, the Contractor shall submit a job hazard analysis of each major phase of work prior to entering that phase of activity. The analysis shall include major or high risk hazards, as well as commonly recurring deficiencies that might possibly be encountered for that operation, and shall identify proposed methods and techniques of accomplishing each phase in a safe manner. The Prime Contractor's superintendent shall take active participation in the Job Hazard Analysis, including the subcontractors' work. Prior to start of actual work a meeting shall be held with Prime Contractor, Government, and affected subcontractor to review the Job Hazard Analysis. In addition, job site meetings shall be held to indoctrinate foreman and workers on details of this analysis.

1.9.4 Violations

If recurring violations and/or gross violation indicate that the safety performance is unsatisfactory, Corrective action shall be taken as directed, and at the discretion of the Contracting Officer's Representative the retention or some part thereof will be withheld from the progress payment until corrective action has been completed.

1.9.5 Elevated Work Areas

Workers in elevated work areas in excess of 6 feet above an adjoining surface require special safety attention. In addition to the provisions of EM 385-1-1, the following safety measures are required to be submitted to the Contracting Officer's Representative prior to commencement of work in elevated work areas, the Contractor shall submit drawings depicting all provisions of his positive protection system including, but not limited to, all details of guard rails.

- (a) Positive protection for workmen engaged in the installation of structural steel and steel joists shall be provided by safety nets, tie-off's, hydraulic man lifts, scaffolds, or other required means. Decking crews must be tied-off or work over nets or platforms not over 6 feet below the work area. Walking on beams and/or girders and the climbing of columns is prohibited without positive protection.

- (b) Perimeter guard rails shall be installed at floor, roof, or wall openings more than 6 feet above an adjoining surface and on roof perimeters. Rails shall be designed to protect all phases of elevated work including, but not limited to, roofing operations and installation of gutters and flashing. Rails around roofs may not be removed until all work on the roof is complete and all traffic on or across the roof ceases. Rails shall be designed by a licensed engineer to provide adequate stability under any anticipated impact loading. As a minimum, the rails shall consist of a top rail at a height of 42 inches, a mid rail and a toe board. Use of tie-offs, hydraulic man lifts, scaffolds, or other means of roof edge protection methods may be utilized on small structures such as family housing, prefabricated metal buildings, etc.

1.9.6 Fire Protection

Twenty-four hours notice shall be given to the Contracting Officer for coordination with the Facility Fire Department prior to conducting any fire hazardous operation. Cutting or welding will be permitted only in areas that are or have been made fire safe. Where possible, all combustibles shall be located at least 35 feet horizontally from the work site. Where such location is impracticable, combustibles shall be protected with flame-proofed covers or otherwise shielded with metal or asbestos guards or curtains. Edges of covers at the floor shall be tight to prevent sparks from going under them. This precaution is also important at overlaps where several covers are used to protect a large pile. Other fire prevention precautions shall be in accordance with the latest National Fire Codes.

1.9.7 Recordingkeeping/Reporting Requirements

On all contract operations, the Prime Contractor shall be responsible for recording and reporting all accident exposure and experience incident work. (This includes exposure and experience of the prime Contractor and his/her sub-contractor(s)). As a minimum these records shall include exposure work-hours and a log of occupational injuries and illnesses. (OSHA Form 200 or state equivalent as prescribed by 29 CFR 1904.5) Reference EM 385-1-1, 02.A.02.

1.9.8 Accident Reporting

As part of the requirements for reporting accidents in accordance with EM 385-1-1, Section 2, the Prime Contractor will submit at the 50% point and 100% of project completion, a written summary of worker's compensation claims filed by workers on the project. The report will include all subcontractors. The main report covering the Prime Contractor claims will be certified as "correct and true" by the Contractor's compensation insurance carrier. The same certification will be required for subcontractor reports.

1.10 PUBLIC CONVENIENCE AND SAFETY

The Contractor shall conduct his operations so as to offer the least possible obstruction and inconvenience to public traffic, and all traffic shall be permitted to pass through work with as little delay as possible. Where the nature of construction operations in progress and the equipment and machinery in use are of such character as to endanger passing traffic, the Contractor shall provide such lights and signs, erect such fence, or barriers, and station such guards as may be necessary to give adequate warning and to avoid damage or injury to passing traffic. Signs, flags,

lights, and other warning and safety devices shall conform to applicable city, county, and state requirements.

1.11 EXCAVATION PERMITS

All excavation permits will be issued to the Contractor from the Base Civil Engineer (BCE) through the Contracting Officer. The appropriate form, for this request, may be obtained from the Contracting Officer. Processing time required by the BCE is 14 calendar days. Questions concerning the excavation permit should be directed to the Contracting Officer.

1.12 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

1. This provision specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the CONTRACT CLAUSE, Section 00700, entitled "DEFAULT (FIXED-PRICE CONSTRUCTION)". In order for the Contracting Offices to award a time extension under this clause, the following conditions must be satisfied.
 - (a) The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.
 - (b) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.
2. The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK DAYS BASED ON (5) DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
---	---	---	---	---	---	---	---	---	---	---	---
(09)	(05)	(03)	(01)	(00)	(00)	(02)	(02)	(01)	(02)	(03)	(07)

3. Upon acknowledgement of the Notice to Proceed (NTT) and continuing throughout the contract, the Contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day. (ER 415-1-15, 31 OCT 89)

1.13 HOUSEKEEPING AND CLEANUP

Pursuant to the requirements of paragraph, CLEANING UP and paragraph, ACCIDENT PREVENTION, Of the CONTRACT CLAUSES, Section 00700, the Contractor shall assign sufficient personnel to insure strict compliance. The Contractor shall submit a detailed written plan for implementation of this requirement. The plan will be presented as part of the preconstruction safety plan and will provide for keeping the total construction site, structures and accessways free of debris and obstructions at all times. Work will not be allowed in those areas that, in the opinion of the

Contracting Officer's representative, have unsatisfactory cleanup and housekeeping at the end of the preceding day's normal work shift. At least once each day all areas shall be checked by the Quality Control person of the Prime Contractor and the findings recorded on the Quality Control Daily Report. In addition, the Quality Control person will take immediate action to insure compliance with this requirement. Housekeeping and cleanup shall be assigned by the Contractor to specific personnel. The name(s) of the personnel shall be available at the project site; each person will be supplied with a distinctively marked hard hat, to be worn from the beginning to the end of the project.

1.14 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE

1. Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a Contractor or subcontractor at any tier shall be based on actual cost data when the Government can determine both ownership and operating costs for each piece of equipment or equipment groups of similar serial and series from the Contractor's accounting records. When both ownership and operating costs cannot be determined from the Contractor's accounting records, equipment costs shall be based upon the applicable provisions of EP 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule, Region VII. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the Contracting Officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retrospective pricing, the schedule in effect at the time the work was performed shall apply.
2. Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36 substantiated by certified copies of paid invoices. Rates for equipment rented from an organization under common control, lease-purchase or sale-leaseback arrangements will be determined using the schedule except that rental costs leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated leases are allowable. Costs for major repairs or overhaul are unallowable.
3. When actual equipment costs are proposed and the total amount of the pricing action is over \$25,000, cost or pricing data shall be submitted on Standard Form 1411, "Contract Pricing Proposal Cover Sheet". By submitting cost or pricing data, the Contractor grants to the Contracting Officer or an authorizing representative the right to examine those books, records, documents and other supporting data that will permit evaluation of the proposed equipment costs. After price agreement, the Contractor shall certify that the equipment costs or pricing data submitted are accurate, complete and current.

1.15 SPECIAL CONSTRUCTION RESTRAINTS/REQUIREMENTS

1. Existing facilities shall be protected from damage throughout the course of the contract. Protection measures shall be as described herein, as indicated on drawings, and as may otherwise be required to protect the existing facilities. If the existing facilities are damaged in any way, the Contractor shall be responsible for restoring the damaged area to a like-new condition and to the satisfaction of the Contracting Officer.

- (a) The Contractor shall submit a request to interrupt any such services to the Contracting Officer, in writing, fourteen (14) days in advance of proposed interruption. The request shall state reason, date, exact time of, and approximate duration of such an interruption. Interruptions in utility services shall be of the shortest possible duration for the work at hand. Any outage shall not exceed 2 hours, unless previously approved by the Contracting Officer. Outages shall occur during the weekends.
 - (b) The Contractor will be advised (in writing) of approval of request, or of which other date and/or time such interruption will cause least inconvenience to operations of the Base.
- 2. Normal working hours shall be between the hours of 0600-1700, Monday thru Friday. No work shall be conducted on weekends or Federal/Military holidays.
 - 3. Coordination of Trades: The Contractor is responsible for planning the proper installation of all equipment within the required spaces and work areas. The Contractor shall conduct an inspection of all work areas and will coordinate with his various trades to ensure that proper installation is achieved. Failure to perform proper planning which results in delays or increases the cost shall be the responsibility of the Contractor.
 - 4. Use or travel of vehicle or heavy equipment on location outside the project limits shown on the drawings is prohibited.

1.16 SOIL DENSITY TEST (USING METERS CONTAINING RADIOACTIVE MATERIALS)

Nuclear methods are not acceptable for soil and soil-aggregate density tests required by this contract except as stated in DIVISION 2. Testing for official results shall be conducted as specified in DIVISION 2 of this contract, If the Contractor proposes to use meters containing radioactive materials to obtain unofficial results for his own convenience, the Contractor shall adhere to the following requirements:

- 1. USAF Radioactive Material Permit shall be obtained prior to work being performed.
- 2. The Contractor shall contact the installation Radiation Protection Officer (RPO) at least 45 days prior to intended usage so adequate time is provided for processing the paperwork and obtaining the USAF Radioactive Material Permit.
- 3. The Contractor shall notify the RPO before bringing the radioactive material onto the installation and must notify the RPO when radioactive material is removed. The Contractor shall ensure that the RPO, installation fire department, and safety office know the locations where the material will be stored and used.
- 4. The Contractor shall comply with the requirements of his/her NRC or Agreement State license and the USAF Radioactive Material Permit.
- 5. The Installation RPO will periodically check the use of the radioactive material to ensure proper radiological health precautions are being followed. If the RPO discovers improper radiological procedures, the RPO will immediately notify the contract monitor to initiate corrective

actions.

6. Applications for USAF Radioactive Material Permits are submitted as follows:
 - (a) All applications for permits shall be submitted to host base RPO for review and approval of qualified users to work on Air Force installations.
 - (b) Requests will be submitted in duplicate to RPO and will include:
 - (1) Evidence of a valid Nuclear Regulatory Commission {NRC} or Agreement State Radioactive Material License.
 - (2) A copy of an NRC Form 241, or a similar document (such as a letter), listing the specific licensable items the Contractor wishes to use on the base (in the case of an Agreement State licensee, the original must be forwarded by the Contractor to the appropriate NRC region).
 - (3) Proof of a valid Air Force contract.
 - (c) Non-Air Force organizations which possess Agreement State licenses must forward an NRC Form 241 directly to the applicable NRC regional office as well as to the committee {Reference Title 10, Code of Federal Regulations, Part 150.20}. Agreement State licenses are valid for only 180 calendar days per calendar year. If the non-Air Force organization that possesses the Agreement State license wishes to conduct operations on the Air Force installation for more than 180 days per year, it must apply for and be issued an NRC license before a permit may be issued.
7. Renewal or termination of a USAF Radioactive Material Permit is processed as follows:
 - (a) Non-Air Force Organizations must formally apply for either a renewal or termination of their permit upon its expiration. Permits do not automatically terminate upon reaching their expiration date but remain active pending final disposition of the radioactive material.
 - (b) If the original contract is renewed or continued, then an application for renewal must contain the same information as the initial request.
 - (c) If work under the contract has been completed, the non-Air Force organization shall submit a formal application to terminate the permit. This application shall include appropriate disposal documents and radiation survey data to confirm that the radioactive materials have been removed from the installation.
(AFR 161-16)

1.17 DISPOSAL OF MATERIAL

All excess material, waste, and unsuitable material shall be removed from Government property.

1.18 CONTRACTOR-SAFETY PERSONNEL REQUIREMENTS (1985 JAN HQ USACE)

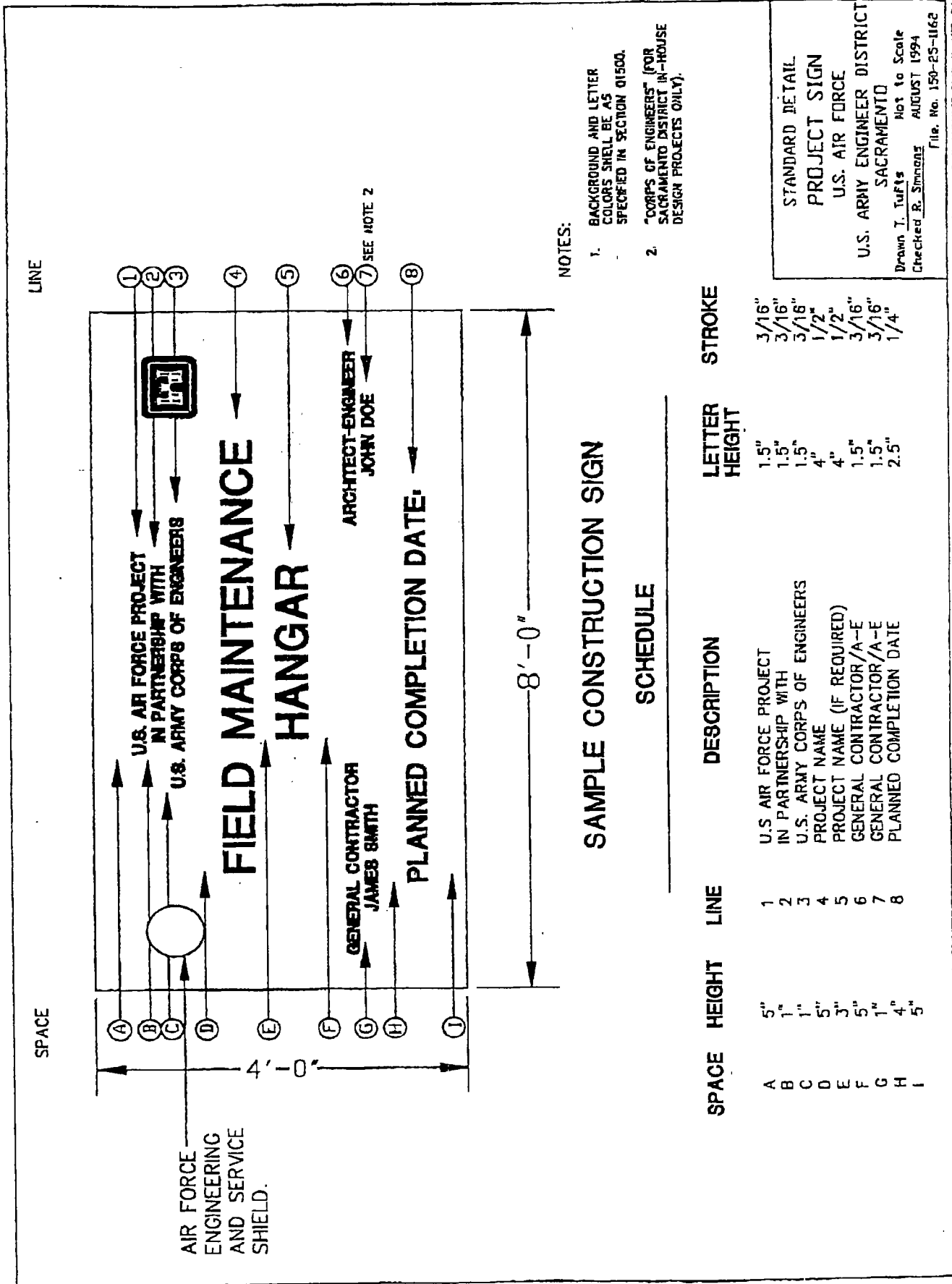
1. Full-time, on-site, safety coverage by Contractors shall be required for the life of the contract.
2. The following conditions shall be met:
 - (a) The Contractor shall employ, to cover all hours of work at the project site(s), at least one safety and health person to manage the Contractor's safety program; duties which are not germane to the safety program shall not be assigned to this person(s) except as follows. The principal safety and health person shall report to and work directly to the Contractor's top on-site manager, corporate safety office, or other high-level official of equivalent position. The safety and health person(s) shall have the authority to take immediate steps to correct unsafe or unhealthful conditions. The employment of a safety and health person(s) shall not abrogate the safety and health responsibilities of other personnel.
 - (b) Qualifications for Safety and Health Person(s)
 - (1) Safety and Health Person(s) shall have a degree in engineering or safety in at least a four year program from an accredited school and shall have been engaged in safety and occupational health for at least one (1) year of experience (no time being credited to this one (1) year unless at least fifty (50) percent of the time was devoted to safety and occupational health) and shall have at least one (1) year experience in construction, or--
 - (2) Safety and Health Person(s) shall have legal registration as a Professional Engineer or a Certified Safety Professional and shall have been engaged in safety and occupational health for at least one (1) year of experience (no time being credited to this one (1) year unless at least fifty (50) percent of the time was devoted to safety and occupational health) and shall have at least one (1) year experience in construction, or--
 - (3) Safety and Health Person(s) shall have a degree other than that specified in (a) above, and shall have been engaged in safety and occupational health for at least three (3) years of experience (no time being credited to these three (3) years unless at least fifty (50) percent of the time each year was devoted to safety and occupational health) and shall have at least two (2) years experience in construction, or--
 - (4) In lieu of a degree, Safety and Health person(s) shall have been engaged in safety and occupational health for at least five (5) years of experience (no time being credited to these five (5) years unless at least fifty (50) percent of the time each year was devoted to safety and occupational health) and shall have at least two (2) years experience in construction. The individual must also be a Certified Safety Professional.
 - (5) First aid work is not a creditable experience.
 - (c) The name and qualifications of the nominated safety and health person(s) shall be furnished to the Contracting Officer for acceptability and a functional description of duties shall be provided

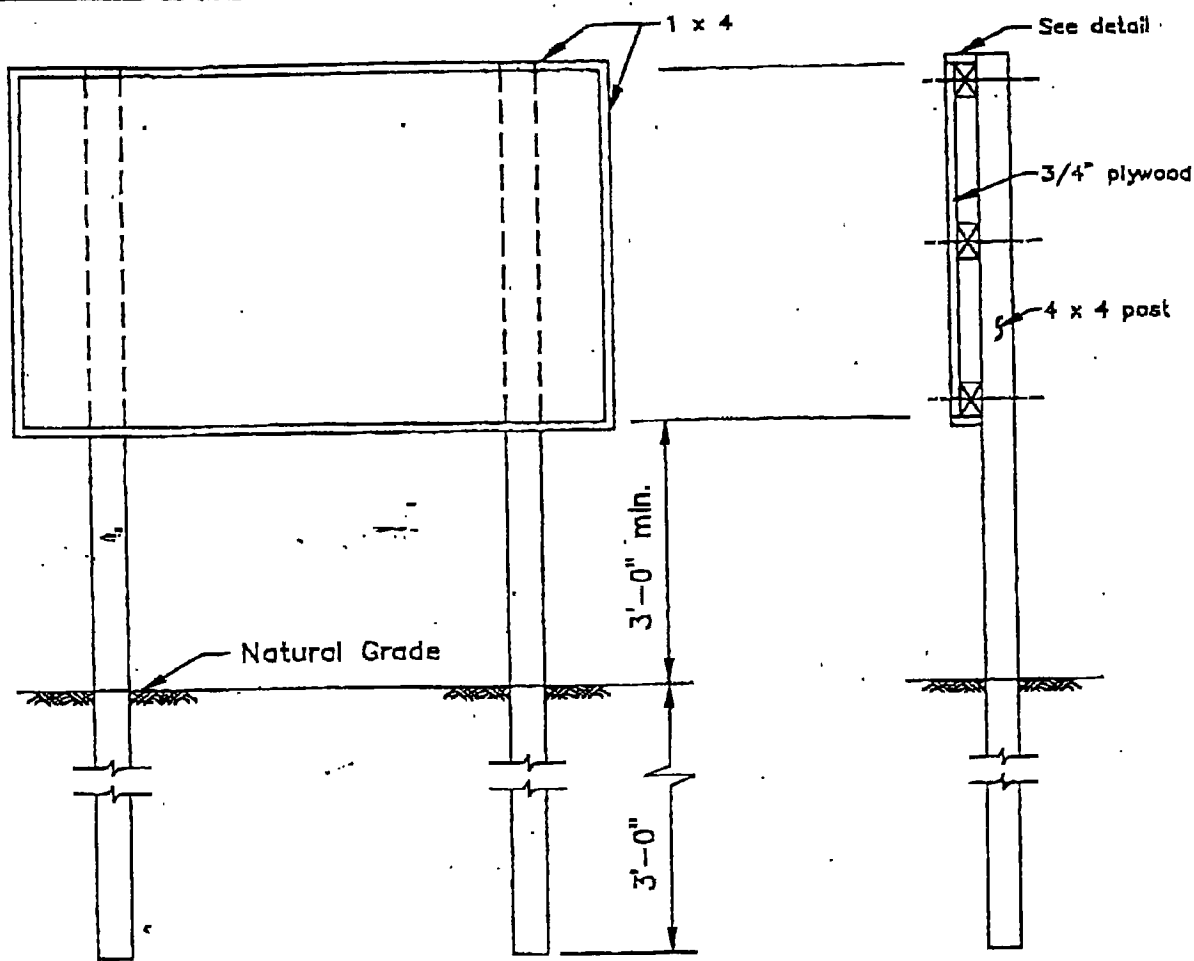
prior to the pre-work conference. (52.2/9303)

NOTE: The Contractor shall have one or more Safety and Health Persons, each of whom meets the qualifications of 1.19.2(b) Qualifications for Safety and Health Person(s), physically present on the actual site of the work whenever work of any sort is being performed by a Contractor, subcontractor, or supplier personnel on the work site. The foregoing clause language shall not be interpreted to contravene this note.

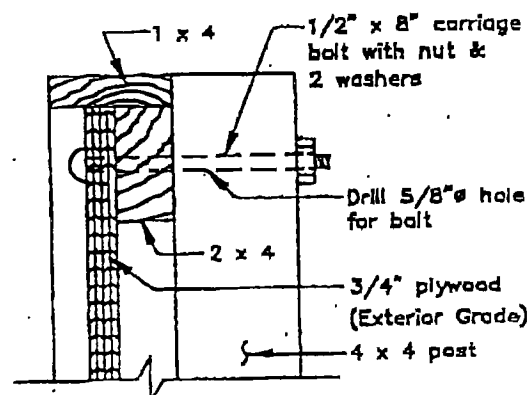
-- End of Section --

JUN 14 '99 09:36AM US ARMY COE LUKE P O



JUN 14 '99 09:36AM US ARMY COE LUKE P O
CORPS OF ENGINEERSELEVATIONSECTIONGENERAL NOTES:

1. Lumber to be cut & formed accurately.
2. Secure 1 x 4 and plywood with 8d finish nails at not less than 12" O.C.
3. All exposed nails to be set & holes filled with putty.
4. Sign to be set in good solid ground & backfill carefully tamped into place.
5. Where necessary posts shall be braced to provide a solid installation.

DETAIL

CONSTRUCTION SIGN ERECTION
DETAILS FOR PROJECT SIGN

STANDARD DETAIL
SIGN DETAILS

U.S. ARMY ENGINEER DISTRICT
 SACRAMENTO

Drawn M. Koenig
 Checked R. Simmons

Not to Scale
 NOV. 1987

File No. 150-25-1232

JUN 14 1999 09:37AM U.S. ARMY COE LUKE P O

P. 17
U.S. ARMY

SPACE	6'-0"	LINE
A	(CONTRACTOR'S NAME)	1
B	(ADDRESS)	2
C	SAFETY IS A JOB REQUIREMENT	3
D		4
E	THIS CONTRACT HAS OPERATED DAYS	5
F	WITHOUT A LOST TIME INJURY	6
G	PREVIOUS RECORD DAYS	

SCHEDULE

SPACE	HEIGHT	LINE	DESCRIPTION	LETTER HEIGHT
A	5"	1	CONTRACTOR'S NAME	5"
B	3"	2	ADDRESS	3"
C	6"	3	SAFETY IS A JOB REQUIREMENT	4 1/2" & 3"
D	3"	4	ALL LETTERING	3"
E	3"	5	ALL LETTERING	3"
F	3"	6	ALL LETTERING	3"
G	5"			

NOTE:

LETTERING SHALL BE COLOR AS SPECIFIED IN SECTION 01500. SIGN SHALL BE INSTALLED IN THE SAME MANNER AS THE PROJECT SIGN.

STANDARD DETAIL

SAFETY SIGN

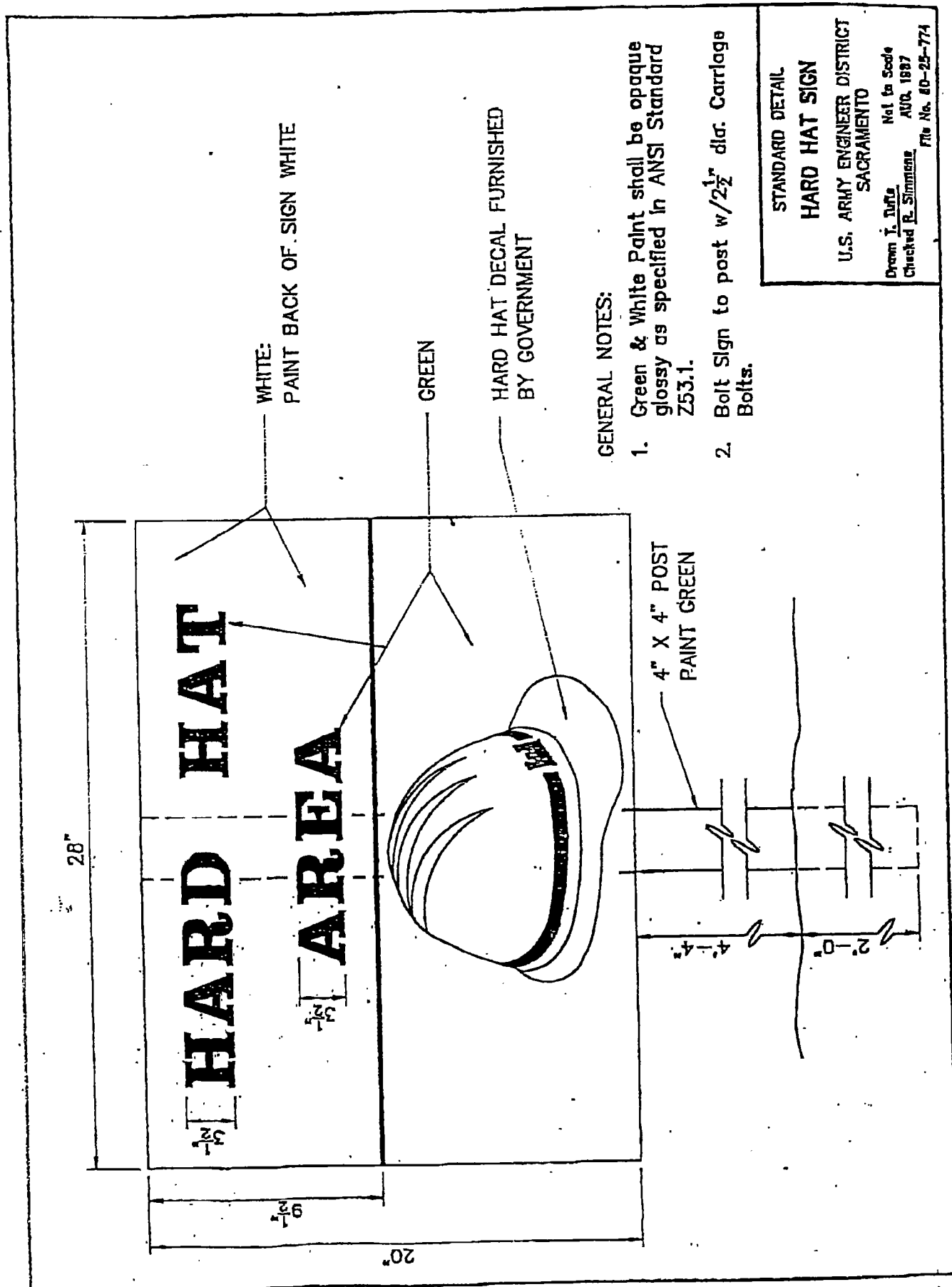
U S ARMY ENGINEER DISTRICT
SACRAMENTO

Drawn T. Tuttle Not to Scale
Checked R. Simmons NOV. 1991

File number 80-25-707

JUN 14 '99 09:37AM US ARMY COE LUKE P O

C. F. 18 ARMY



SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01090

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

1.2 ORDERING INFORMATION

-- End of Section Table of Contents --

SECTION 01090

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the sponsoring organization, e.g.

UL 1 (1993; Rev thru Jan 1995) Flexible Metal Conduit. However, when the sponsoring organization has not assigned a number to a document, an identifying number has been assigned for convenience, e.g. UL's unnumbered 1995 edition of their Building Materials Directory is identified as UL-01 (1995) Building Materials Directory. The sponsoring organization number (UL 1) can be distinguished from an assigned identifying number (UL-01) by the lack of a dash mark (-) in the sponsoring organization assigned number.

1.2 ORDERING INFORMATION

The addresses of the organizations whose publications are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the sponsoring organization should be ordered from the source by title rather than by number.

ACI INTERNATIONAL (ACI)

P.O. Box 9094
Farmington Hills, MI 48333-9094
Ph: 248-848-3800
Fax: 248-848-3801
Internet: <http://www.aci-int.org>

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

4301 North Fairfax Dr., Suite 425
ATTN: Pubs Dept.
Arlington, VA 22203
Ph: 703-524-8800
Fax: 703-528-3816
E-mail: ari@ari.org
Internet: www.ari.org

AIR MOVEMENT AND CONTROL ASSOCIATION (AMCA)

30 W. University Dr.
Arlington Heights, IL 60004-1893
Ph: 708-394-0404
Fax: 708-253-0088

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

ALUMINUM ASSOCIATION (AA)

Pubs Department
P.O. Box 753
Waldorf, MD 20601
Ph: 301-645-0756
Fax: 301-843-0159
Internet: www.aluminum.org

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)

1827 Walden Ofc. Sq.
Suite 104
Schaumburg, IL 60173-4268
Ph: 847-303-5664
Fax: 847-303-5774
Internet: www.aamanet.org

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
(AASHTO)

444 N. Capital St., NW, Suite 249
Washington, DC 20001
Ph: 800-231-3475
Fax: 800-525-5562
Internet: www.aashto.org
NOTE: AASHTO documents with numbers beginning with
M or T are available only in Standard Specifications
for Transportation Materials and Methods of Sampling
and Testing, 1997 @\$289.00\X

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

P.O. Box 12215
1 Davis Drive
Research Triangle Park, NC 27709-2215
Ph: 919-549-8141
Fax: 919-549-8933

AMERICAN BEARING MANUFACTURERS ASSOCIATION (ABEMA)

1200 19th Street, NW, Suite 300
Washington, DC 20036-4303
Ph: 202-429-5155
Fax: 202-223-4579

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)

1330 Kemper Meadow Dr.
Cincinnati, OH 45240
Ph: 513-742-2020
Fax: 513-742-3355

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

One East Wacker Dr., Suite 3100
Chicago, IL 60601-2001
Ph: 312-670-2400

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

Publications: 800-644-2400
Fax: 312-670-2400
Internet: <http://www.aiscweb.com>

AMERICAN IRON AND STEEL INSTITUTE (AISI)

ATTN: Publication Orders
P.O. Box 4321
Chestertown, MD 21690
Ph: 800-277-3850
Fax: 410-810-0910

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

11 West 42nd St
New York, NY 10036
Ph: 212-642-4900
Fax: 212-398-0023
Internet: www.ansi.org/

AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)

1711 Arlingate Lane
P.O. Box 28518
Columbus, OH 43228-0518
Ph: 800-222-2768
Fax: 614-274-6899

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Ph: 610-832-9500
Fax: 610-832-9555
Internet: www.astm.org
NOTE: The annual ASTM Book of Standards (66 Vol) is
available for \$3500.00. Prices of individual standards vary.

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

1801 Alexander Bell Drive
Reston, VA 20190-4400
Ph: 800-548-2723
Fax: 703-295-6333
Internet: www.pubs.asce.org
e-mail: marketing@asce.org

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING
ENGINEERS (ASHRAE)

1791 Tullie Cir., NE
Atlanta, GA 30329-2305
Ph: 800-527-4723 or 404-636-8400
Fax: 404-321-5478
Internet: <http://www.ashrae.org>

AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE)

P.O. Box 40362

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

Bay Village, OH 44140
Ph: 216-835-3040
Fax: 216-835-3488
E-mail: asse@ix.netcom.com

AMERICAN WATER WORKS ASSOCIATION(AWWA)

6666 West Quincy
Denver, CO 80235
Ph: 800-926-7337
Fax: 303-795-1989
Internet: www.awwa.org

AMERICAN WELDING SOCIETY (AWS)

550 N.W. LeJeune Road
Miami, FL 33126
Ph: 305-443-9353
Fax: 305-443-7559
Internet: http://www.amweld.org

AMERICAN WOOD-PRESERVERS' ASSOCIATION (AWPA)

3246 Fall Creek Highway, Suite 1900
Grandbury, TX 76049-7979
Ph: 817-326-6300
Fax: 817-326-6306
NOTE: AWWPA Book of Standards is published yearly @\$75.00;
individual standards may be ordered separately for \$12.00 to
\$28.00 each.

ARCHITECTURAL WOODWORK INSTITUTE (AWI)

1952 Isaac Newton Square
Reston, VA 20190
Ph: 703-733-0600
Fax: 703-733-0584
Internet: www.awinet.org

ASBESTOS CEMENT PIPE PRODUCERS ASSOCIATION (ACPPA)

1745 Jefferson Davis Highway, Suite 406
Arlington, VA 22202
Ph: 703-412-1153
Fax: 703-412-1152

ASSOCIATED AIR BALANCE COUNCIL (AABC)

1518 K St., NW, Suite 503
Washington, DC 20005
Ph: 202-737-0202
Fax: 202-638-4833

ASSOCIATION OF EDISON ILLUMINATING COMPANIES (AEIC)

600 No. 18th St.
P.O. Box 2641
Birmingham, AL 35291-0992
Ph: 205-257-2530

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

Fax: 205-257-2540
Internet: <http://www.aeic.org/index.htm>
E-Mail: veazey-white@apc.com

BUILDERS HARDWARE MANUFACTURERS ASSOCIATION (BHMA)

355 Lexington Ave. New York, NY 10017-6603
Ph: 212-661-4261
Fax: 212-370-9047
Internet: www.buildershardware.com

CALIFORNIA REDWOOD ASSOCIATION (CRA)

405 Enfrente Ave., Suite 200
Novato, CA 94949
Ph: 415-382-0662
Fax: 415-382-8531

CARPET AND RUG INSTITUTE (CRI)

310 Holiday Ave.
P.O. Box 2048
Dalton, GA 30722-2048
Ph: 706-278-0232
Fax: 706-278-8835
Internet: carpet-rug.com

CAST IRON SOIL PIPE INSTITUTE (CISPI)

5959 Shallowford Rd., Suite 419
Chattanooga, TN 37421
Ph: 423-892-0137
Fax: 423-892-0817

CODE OF FEDERAL REGULATIONS (CFR)

Order from:
Government Printing Office
Washington, DC 20402
Ph: 202-512-1800
Fax: 202-275-7703
Internet: <http://www.pls.com:8001/his/cfr.html>

COMMERCIAL ITEM DESCRIPTIONS (CID)

Order from:
General Services Administration
Federal Supply Service Bureau
470 E L'Enfant Plaza, S.W.
Washington, DC 20407
Ph: 202-619-8925
Internet: <http://pub.fss.gsa.gov/h1-pub.html>

COMPRESSED GAS ASSOCIATION (CGA)

1725 Jefferson Davis Highway, Suite 1004
Arlington, VA 22202-4102
Ph: 703-412-0900
Fax: 703-412-0128

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

Internet: www.cganet.com
e-mail: Customer_Service@cganet.com

COOLING TOWER INSTITUTE (CTI)

P.O. Box 73383
Houston, TX 77273
Ph: 281-583-4087
Fax: 281-537-1721

COPPER DEVELOPMENT ASSOCIATION (CDA)

260 Madison Ave.
New York, NY 10016
Ph: 212-251-7200
Fax: 212-251-7234
E-mail: <http://www.copper.org>

CORPS OF ENGINEERS (COE)

Order from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services
Branch, TIC
3909 Halls Ferry Rd.
Vicksburg, MS 39180-6199
Ph: 601-634-2571
Fax: 601-634-2506
NOTE: COE Handbook for Concrete and Cement (Documents w/prefix
CRD-C) (1949-present; 2 Vol) free to Government offices; \$10.00
plus \$8.00 per yr for 4 qtrly supplements to others). Individual
documents, single copies free. Order from address above.

COUNCIL OF AMERICAN BUILDING OFFICIALS (CABO)

5203 Leesburg Pike, Suite 708
Falls Church, VA 22041
Ph: 703-931-4533
Fax: 703-379-1546

DEPARTMENT OF COMMERCE (DOC)

Order From:
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
Ph: 703-487-4600
Fax: 703-321-8547
Internet: <http://www.ntis.gov>

DOOR AND HARDWARE INSTITUTE (DHI)

14170 Newbrook Dr.
Chantilly, VA 20151-2232
Ph: 703-222-2010
Fax: 703-222-2410

EIFS INDUSTRY MEMBERS ASSOCIATION (EIMA)

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

402 No. 4th St., Suite 102
Yakima, WA 98901-2470
Ph. 509-457-3500
Fax: 509-457-0169

ELECTRONIC INDUSTRIES ASSOCIATION (EIA)

2500 Wilson Blvd.
Arlington, VA 22201-3834
Ph: 703-907-7500
Fax: 703-907-7501
Internet: www.eia.org
Order Publications from:
Global Engineering Documents
15 Inverness Lane East
Englewood, CO 80112
Ph: 800-854-7179
Fax: 303-397-2740
Internet: <http://global.ihs.com>

ENGINEERING MANUALS (EM)

USACE Publications Depot
Attn: CEIM-SP-D
2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081

ENGINEERING REGULATIONS (ER)

USACE Publications Depot
Attn: CEIM-SP-D 2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081

ENVIRONMENTAL PROTECTION AGENCY (EPA)

Public Information Center
401 M St., SW
Washington, DC 20460
Ph: 800-490-9198
FAX: 202-260-6257
Internet: <http://www.epa.gov>
NOTE: Some documents are available only from:
National Technical Information Services (NTIS)
5285 Port Royal Rd.
Springfield, VA 22161
Ph: 800-553-6847
Fax: 703-321-8547
Internet: <http://www.fedworld.gov/ntis/ntishome.html>

FACTORY MUTUAL ENGINEERING AND RESEARCH (FM)

1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, MA 02062-9102
Ph: 617-255-4681
Fax: 617-255-4359
Internet: <http://www.factorymutual.com>

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

FEDERAL SPECIFICATIONS (FS)

Order from:
General Services Administration
Federal Supply Service Bureau
470 L'Enfant Plaza, S.W.
Washington, DC 20407
Ph: 202-619-8925
Fax: 202-619-8978
Internet: <http://pub.fss.gsa.gov/>

FEDERAL STANDARDS (FED-STD)

Order from:
General Services Administration
Federal Supply Service Bureau
470 E L'Enfant Plaza, S.W.
Washington, DC 20407
Ph: 202-619-8925
Fax: 202-619-8978
Internet: <http://pub.fss.gsa.gov/>

GLASS ASSOCIATION OF NORTH AMERICA (GANA)

3310 S.W. Harrison St.
Topeka, KS 66611-2279
Ph: 913-266-7013
Fax: 913-266-0272
Internet: www.cssinfo.com/info/gana.html

GYP SUM ASSOCIATION (GA)

810 First St. NE, Suite 510
Washington, DC 20002
Ph: 202-289-5440
Fax: 202-289-3707

HYDRAULIC INSTITUTE (HI)

9 Sylvan Way, Suite 180
Parsippany, NJ 07054-3802
Ph: 888-786-7744 or 973-267-9700
Fax: 973-267-9053

INSECT SCREENING WEAVERS ASSOCIATION (ISWA)

P.O. Box 1018
Ossining, NY 10562
Ph: 914-962-9052
Fax: 914-923-3031

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

445 Hoes Ln, P. O. Box 1331
Piscataway, NJ 08855-1331
Ph: 732-981-0060 OR 800-701-4333
Fax: 732-981-9667
Internet: <http://www.ieee.org>

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

E-mail: customer.service@ieee.org
Note: Documents may also be ordered from:
Global Engineering Documents
15 Inverness Way East
Englewood, CO 80112
Ph: 800-854-7179
Fax: 303-397-2740
Internet: global.ihs.com

INSULATED CABLE ENGINEERS ASSOCIATION (ICEA)

P.O. Box 440
South Yarmouth, MA 02664
Ph: 508-394-4424
Fax: 508-394-1194
E-mail: www.electricnet.com/orgs/insucbl.htm

INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO)

5360 Workman Mill Rd.
Whittier, CA 90601-2298
Ph: 310-699-0541
Fax: 310-692-3853

MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS
INDUSTRY (MSS)

127 Park St., NE
Vienna, VA 22180-4602
Ph: 703-281-6613
Fax: 703-281-6671
Internet: [//cssinfo.com/info/mss/html](http://cssinfo.com/info/mss/html)

MARBLE INSTITUTE OF AMERICA (MIA)

33505 State St.
Farmington, MI 48335
Ph: 810-476-5558
Fax: 810-476-1630

MIDWEST INSULATION CONTRACTORS ASSOCIATION (MICA)

2017 So. 139th Cir.
Omaha, NE 68144
Ph: 402-342-3463
Fax: 402-330-9702

MILITARY STANDARDS (MIL-STD)

Order from:
Standardization Documents Order Desk
Building 4, Section D
700 Robbins Ave.
Philadelphia, PA 19111-5094
Ph: 215-697-2179
Fax: 215-697-2978
Internet: www.dodssp.daps.mil

NATIONAL ASSOCIATION OF PLUMBING-HEATING-COOLING CONTRACTORS

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

(NAPHCC)

180 S. Washington Street
P.O. Box 6808
Falls Church, VA 22046
Ph: 800-533-7694
Fax: 703-237-7442

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

1300 N. 17th St., Suite 1847
Rosslyn, VA 22209
Ph: 703-841-3200
Fax: 202-457-8473
Internet: <http://www.nema.org/>
Order Publications from:
Global Engineering Documents
15 Inverness Way East
Englewood, CO 80112-5776
Ph: 800-264-3974
Fax: 303-397-7935
Internet: <http://global.ihs.com>

NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB)

8575 Grovemont Circle
Gaithersburg, MD 20877-4121
Ph: 301-977-3698
Fax: 301-977-9589

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

One Batterymarch Park P.O. Box 9101
Quincy, MA 02269-9101
Ph: 800-344-3555
Fax: 800-593-6372
Internet: <http://www.nfpa.org>
NOTE: The complete set of 1997 NFPA National Fire Codes (13 Vol.)
is available for \$835.00.

NATIONAL HARDWOOD LUMBER ASSOCIATION (NHLA)

P.O. Box 34518
Memphis, TN 38184-0518
Ph: 901-377-1818
Fax: 901-382-6419
e-mail: nhla@natlhardwood.org

NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES
(NICET)

1420 King Street
Alexandria, VA 22314-2794
Ph: 888-476-4238
Internet: www.nicet.org

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

Mail Stop C-13

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

4676 Columbia Parkway
Cincinnati, OH 45226-1998
Ph: 800-356-4676
Internet: <http://www.cdc.gov/niosh/homepage.html>
To order pubs for which a fee is charged, order from:
Superintendent of Documents
Government Printing Office
Washington, DC 20402-9325
Ph: 202-512-1800
Fax: 202-512-2250

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)

Department of Commerce
Gaithersburg, MD 20899-0001
Ph: 301-975-4025
Fax: 301-926-1630
Order Publications From:
Superintendent of Documents
U.S. Government Printing Office (GPO)
Washington, DC 20402
Ph: 202-512-1800
Fax: 202-512-2250
or
National Technical Information Services (NTIS)
5285 Port Royal Rd.
Springfield, VA 22161
Ph: 800-553-6847
Fax: 703-321-8547
Internet: <http://www.gov/ntis.gov>

NATIONAL READY-MIXED CONCRETE ASSOCIATION (NRMCA)

900 Spring St.
Silver Spring, MD 20910
Ph: 301-587-1400
Fax: 301-585-4219

NORTHEASTERN LUMBER MANUFACTURERS ASSOCIATION (NELMA)

P.O. Box 87A
Cumberland Center, ME 04021
Ph: 207-829-6901
Fax: 207-829-4293

NSF INTERNATIONAL (NSF)

ATTN: Publications
P.O. Box 130140
Ann Arbor, MI 48113-0140
Ph: 313-913-5744
Fax: 313-769-0109
Internet: www.nsf.org

PLASTIC PIPE AND FITTINGS ASSOCIATION (PPFA)

800 Roosevelt Rd., Bldg C, Suite 20
Glen Ellyn, IL 60137
Ph: 630-858-6540

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

Fax: 630-790-3095

PLUMBING AND DRAINAGE INSTITUTE (PDI)

45 Bristol Dr., Suite 101.
South Easton, MA 02375
Ph: 508-230-3516
Fax: 508-230-3529
E-Mail: pdhw@tiac.net

PORCELAIN ENAMEL INSTITUTE (PEI)

4004 Hillsboro Pike, Suite 224B
Nashville, TN 37215
Ph: 615-385-5357
Fax: 615-385-5463
Internet: www.porcelainenamel.com

PRECAST/PRESTRESSED CONCRETE INSTITUTE (PCI)

175 West Jackson Blvd., Suite 1859
Chicago, IL 60604-9773
Ph: 312-786-0300
Fax: 312-786-0353
Internet: www.pci.org
e-mail: info@pci.org

RURAL UTILITIES SERVICE (RUS)

ATTN: Publications
14th and Independence Ave., SW, Room 4028-S
Washington, DC 20250
Ph: 202-720-8674 OR 202-720-8679
Fax: 202-205-3654

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

400 Commonwealth Dr.
Warrendale, PA 15096-0001
Ph: 724-776-4970
Fax: 724-776-0790
Internet: <http://www.sae.org>
e-mail: publications@sae.org

SOUTHERN CYPRESS MANUFACTURERS ASSOCIATION (SCMA)

400 Penn Center Boulevard, Suite 530
Pittsburgh, PA 15235
Ph: 412-829-0770
Fax: 412-829-0844

SOUTHERN PINE INSPECTION BUREAU (SPIB)

4709 Scenic Highway
Pensacola, FL 32504-9094
Ph: 850-434-2611
Fax: 850-433-5594
e-mail: spib@spib.org

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

STEEL DECK INSTITUTE (SDI)

P.O. Box 25
Fox River Grove, IL 60021
Ph: 847-462-1930
Fax: 847-462-1940
Internet: <http://www.sdi.org>
e-mail: janet@sdi.org

STEEL DOOR INSTITUTE (SDOI)

30200 Detroit Rd.
Cleveland, OH 44145-1967
Ph: 216-899-0010
Fax: 216-892-1404

TILE COUNCIL OF AMERICA (TCA)

P.O. Box 1787
Clemson, SC 29633-1787
Ph: 864-646-8453
FAX: 864-646-2821

UNDERWRITERS LABORATORIES (UL)

333 Pfingsten Rd.
Northbrook, IL 60062-2096
Ph: 800-704-4050
Fax: 847-509-6249
Internet: <http://www.ul.com/>
Order from:
Global Engineering Documents
15 Inverness Way East
Englewood, CO 80112-5776
Ph: 800-569-7128
Fax: 303-397-7945
Internet: <http://global.ihs.com>
E-mail: global@ihs.com
Note: First price is for std only. Second price is for
Std, incl Revision Subscription Service.

UNI-BELL PVC PIPE ASSOCIATION (UBPPA)

2655 Villa Creek Dr., Suite 155
Dallas, TX 75234
Ph: 214-243-3902
Fax: 214-243-3907

WEST COAST LUMBER INSPECTION BUREAU (WCLIB)

P.O. Box 23145
Portland, OR 97281
Ph: 503-639-0651
Fax: 503-684-8928

WESTERN WOOD PRODUCTS ASSOCIATION (WWPA)

Yeon Bldg.
522 SW 5th Ave.

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

Portland, OR 97204-2122
Ph: 503-224-3930
Fax: 503-224-3934

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01320

PROJECT SCHEDULE

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 QUALIFICATIONS

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL REQUIREMENTS
- 3.2 BASIS FOR PAYMENT
- 3.3 PROJECT SCHEDULE
 - 3.3.1 Use of the Critical Path Method
 - 3.3.2 Level of Detail Required
 - 3.3.2.1 Activity Durations
 - 3.3.2.2 Procurement Activities
 - 3.3.2.3 Government Activities
 - 3.3.2.4 Responsibility
 - 3.3.2.5 Work Areas
 - 3.3.2.6 Modification or Claim Number
 - 3.3.2.7 Bid Item
 - 3.3.2.8 Phase of Work
 - 3.3.2.9 Category of Work
 - 3.3.2.10 Feature of Work
 - 3.3.3 Scheduled Project Completion
 - 3.3.3.1 Project Start Date
 - 3.3.3.2 Constraint of Last Activity
 - 3.3.3.3 Early Project Completion
 - 3.3.4 Interim Completion Dates
 - 3.3.4.1 Start Phase
 - 3.3.4.2 End Phase
 - 3.3.4.3 Phase X
 - 3.3.5 Default Progress Data Disallowed
 - 3.3.6 Out-of-Sequence Progress
 - 3.3.7 Negative Lags
- 3.4 PROJECT SCHEDULE SUBMISSIONS
 - 3.4.1 Preliminary Project Schedule Submission
 - 3.4.2 Initial Project Schedule Submission
 - 3.4.3 Periodic Schedule Updates
 - 3.4.4 Standard Activity Coding Dictionary
- 3.5 SUBMISSION REQUIREMENTS
 - 3.5.1 Data Disks
 - 3.5.1.1 File Medium
 - 3.5.1.2 Disk Label
 - 3.5.1.3 File Name

- 3.5.2 Narrative Report
- 3.5.3 Approved Changes Verification
- 3.5.4 Schedule Reports
 - 3.5.4.1 Activity Report
 - 3.5.4.2 Logic Report
 - 3.5.4.3 Total Float Report
 - 3.5.4.4 Earnings Report
- 3.5.5 Network Diagram
 - 3.5.5.1 Continuous Flow
 - 3.5.5.2 Project Milestone Dates
 - 3.5.5.3 Critical Path
 - 3.5.5.4 Banding
 - 3.5.5.5 S-Curves
- 3.6 PERIODIC PROGRESS MEETINGS
 - 3.6.1 Meeting Attendance
 - 3.6.2 Update Submission Following Progress Meeting
 - 3.6.3 Progress Meeting Contents
 - 3.6.3.1 Start and Finish Dates
 - 3.6.3.2 Time Completion
 - 3.6.3.3 Cost Completion
 - 3.6.3.4 Logic Changes
 - 3.6.3.5 Other Changes
- 3.7 REQUESTS FOR TIME EXTENSIONS
 - 3.7.1 Justification of Delay
 - 3.7.2 Submission Requirements
 - 3.7.3 Additional Submission Requirements
- 3.8 DIRECTED CHANGES
- 3.9 OWNERSHIP OF FLOAT

-- End of Section Table of Contents --

SECTION 01320

PROJECT SCHEDULE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publications are referenced in the text by basic designation only.

ENGINEERING REGULATIONS (ER)

ER 1-1-11 (1995) Progress, Schedules, and Network
Analysis Systems

1.2 QUALIFICATIONS

The Contractor shall designate an authorized representative who shall be responsible for the preparation of all required project schedule reports.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS, a Project Schedule as described below shall be prepared. The scheduling of construction shall be the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate Project Schedule. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

3.2 BASIS FOR PAYMENT

The schedule shall be the basis for measuring Contractor progress. Lack of an approved schedule or scheduling personnel will result in an inability of the Contracting Officer to evaluate Contractor's progress for the purposes of payment. Failure of the Contractor to provide all information, as specified below, shall result in the disapproval of the entire Project Schedule submission and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. In the case where Project Schedule revisions have been directed by the Contracting Officer and those revisions have not been included in the Project Schedule, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until revisions to the Project Schedule have been made.

3.3 PROJECT SCHEDULE

The computer software system utilized by the Contractor to produce the Project Schedule shall be capable of providing all requirements of this specification. Failure of the Contractor to meet the requirements of this specification shall result in the disapproval of the schedule. Manual methods used to produce any required information shall require approval by the Contracting Officer.

3.3.1 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The Contractor shall provide the Project Schedule in the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

The Project Schedule shall include an appropriate level of detail. Failure to develop or update the Project Schedule or provide data to the Contracting Officer at the appropriate level of detail, as specified by the Contracting Officer, shall result in the disapproval of the schedule. The Contracting Officer will use, but is not limited to, the following conditions to determine the appropriate level of detail to be used in the Project Schedule:

3.3.2.1 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that allow the progress of activities to be accurately determined between payment periods (usually less than 2 percent of all non-procurement activities' Original Durations are greater than 20 days).

3.3.2.2 Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the project schedule. Long lead materials and equipment are those materials that have a procurement cycle of over 90 days. Examples of procurement process activities include, but are not limited to: submittals, approvals, procurement, fabrication, and delivery.

3.3.2.3 Government Activities

Government and other agency activities that could impact progress shall be shown. These activities include, but are not limited to: approvals, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.2.4 Responsibility

All activities shall be identified in the project schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, contractor work force, or government agency performing a given task. Activities shall not belong to more than one responsible party. The responsible party for each activity shall be identified by the Responsibility Code.

3.3.2.5 Work Areas

All activities shall be identified in the project schedule by the work area in which the activity occurs. Activities shall not be allowed to cover more than one work area. The work area of each activity shall be identified by the Work Area Code.

3.3.2.6 Modification or Claim Number

Any activity that is added or changed by contract modification or used to justify claimed time shall be identified by a mod or claim code that changed the activity. Activities shall not belong to more than one modification or claim item. The modification or claim number of each activity shall be identified by the Mod or Claim Number. Whenever possible, changes shall be added to the schedule by adding new activities. Existing activities shall not normally be changed to reflect modifications.

3.3.2.7 Bid Item

All activities shall be identified in the project schedule by the Bid Item to which the activity belongs. An activity shall not contain work in more than one bid item. The bid item for each appropriate activity shall be identified by the Bid Item Code.

3.3.2.8 Phase of Work

All activities shall be identified in the project schedule by the phases of work in which the activity occurs. Activities shall not contain work in more than one phase of work. The project phase of each activity shall be by the unique Phase of Work Code.

3.3.2.9 Category of Work

All Activities shall be identified in the project schedule according to the category of work which best describes the activity. Category of work refers, but is not limited, to the procurement chain of activities including such items as submittals, approvals, procurement, fabrication, delivery, installation, start-up, and testing. The category of work for each activity shall be identified by the Category of Work Code.

3.3.2.10 Feature of Work

All activities shall be identified in the project schedule according to the feature of work to which the activity belongs. Feature of work refers, but is not limited to, a work breakdown structure for the project. The feature of work for each activity shall be identified by the Feature of Work Code.

3.3.3 Scheduled Project Completion

The schedule interval shall extend from NTP to the contract completion date.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. The Contractor shall include as the first activity in the project schedule an activity called "Start Project". The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

3.3.3.2 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the contract completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the contract completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.3.3 Early Project Completion

In the event the project schedule shows completion of the project prior to the contract completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted in the narrative report at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period.

3.3.4 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date.

3.3.4.1 Start Phase

The Contractor shall include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X" activity shall have an "ES" constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.

3.3.4.2 End Phase

The Contractor shall include as the last activity in a project phase an activity called "End Phase X" where "X" refers to the phase of work. The "End Phase X" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.4.3 Phase X

The Contractor shall include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" activity shall be logically tied to the earliest and latest activities in the phase.

3.3.5 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the Actual Start and Finish dates on the Daily Quality Control report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's schedule and the inability of the Contracting Officer to

evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Program features which calculate one of these parameters from the other shall be disabled.

3.3.6 Out-of-Sequence Progress

Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case approval of the Contracting Officer. The Contractor shall propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule.

3.3.7 Negative Lags

Lag durations contained in the project schedule shall not have a negative value.

3.4 PROJECT SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data disk, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

3.4.1 Preliminary Project Schedule Submission

The Preliminary Project Schedule, defining the Contractor's planned operations for the first 60 calendar days shall be submitted for approval within 20 calendar days after the NTP is acknowledged. The approved preliminary schedule shall be used for payment purposes not to exceed 60 calendar days after NTP.

3.4.2 Initial Project Schedule Submission

The Initial Project Schedule shall be submitted for approval within 40 calendar days after NTP. The schedule shall provide a reasonable sequence of activities which represent work through the entire project and shall be at a reasonable level of detail.

3.4.3 Periodic Schedule Updates

Based on the result of progress meetings, specified in "Periodic Progress Meetings," the Contractor shall submit periodic schedule updates. These submissions shall enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgement of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

3.4.4 Standard Activity Coding Dictionary

The Contractor shall use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory, even if some fields are not used.

3.5 SUBMISSION REQUIREMENTS

The following items shall be submitted by the Contractor for the preliminary submission, initial submission, and every periodic project schedule update throughout the life of the project:

3.5.1 Data Disks

Two data disks containing the project schedule shall be provided. Data on the disks shall adhere to the SDEF format specified in ER 1-1-11, Appendix A.

3.5.1.1 File Medium

Required data shall be submitted on 3.5 disks, formatted to hold 1.44 MB of data, under the MS-DOS Version 5. or 6.x, unless otherwise approved by the Contracting Officer.

3.5.1.2 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Preliminary, Initial, Update, or Change), full contract number, project name, project location, data date, name and telephone number or person responsible for the schedule, and the MS-DOS version used to format the disk.

3.5.1.3 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract number. The Contractor shall develop a naming convention that will ensure that the names of the files submitted are unique. The Contractor shall submit the file naming convention to the Contracting Officer for approval.

3.5.2 Narrative Report

A Narrative Report shall be provided with the preliminary, initial, and each update of the project schedule. This report shall be provided as the basis of the Contractor's progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to relay to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis.

3.5.3 Approved Changes Verification

Only project schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.

3.5.4 Schedule Reports

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date,

Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall be printed for those activities in progress or completed.

3.5.4.1 Activity Report

A list of all activities sorted according to activity number.

3.5.4.2 Logic Report

A list of Preceding and Succeeding activities for every activity in ascending order by activity number. Preceding and succeeding activities shall include all information listed above in paragraph Schedule Reports. A blank line shall be left between each activity grouping.

3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. Activities which have the same amount of total float shall be listed in ascending order of Early Start Dates. Completed activities shall not be shown on this report.

3.5.4.4 Earnings Report

A compilation of the Contractor's Total Earnings on the project from the NTP until the most recent Monthly Progress Meeting. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by bid item and sorted by activity numbers. This report shall: sum all activities in a bid item and provide a bid item percent; and complete and sum all bid items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

3.5.5 Network Diagram

The network diagram shall be required on the initial schedule submission and on monthly schedule update submissions. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows from right to left. The activity number, description, duration, and estimated earned value shall be shown on the diagram.

3.5.5.2 Project Milestone Dates

Dates shall be shown on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.5.3 Critical Path

The critical path shall be clearly shown.

3.5.5.4 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

3.5.5.5 S-Curves

Earnings curves showing projected early and late earnings and earnings to date.

3.6 PERIODIC PROGRESS MEETINGS

Progress meetings to discuss payment shall include a monthly onsite meeting or other regular intervals mutually agreed to at the preconstruction conference. During this meeting the Contractor shall describe, on an activity by activity basis, all proposed revisions and adjustments to the project schedule required to reflect the current status of the project. The Contracting Officer will approve activity progress, proposed revisions, and adjustments as appropriate.

3.6.1 Meeting Attendance

The Contractor's Project Manager and Scheduler shall attend the regular progress meeting.

3.6.2 Update Submission Following Progress Meeting

A complete update of the project schedule containing all approved progress, revisions, and adjustments, based on the regular progress meeting, shall be submitted not later than 4 working days after the monthly progress meeting.

3.6.3 Progress Meeting Contents

Update information, including Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date shall be subject to the approval of the Contracting Officer. As a minimum, the Contractor shall address the following items on an activity by activity basis during each progress meeting.

3.6.3.1 Start and Finish Dates

The Actual Start and Actual Finish dates for each activity currently in-progress or completed .

3.6.3.2 Time Completion

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations shall be based on Remaining Duration for each activity.

3.6.3.3 Cost Completion

The earnings for each activity started. Payment will be based on earnings for each in-progress or completed activity. Payment for individual activities will not be made for work that contains quality defects. A

portion of the overall project amount may be retained based on delays of activities.

3.6.3.4 Logic Changes

All logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag durations, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

3.6.3.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather. 2) delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule which does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests an extension of the contract completion date, or any interim milestone date, the Contractor shall furnish the following for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is obligatory to any approvals.

3.7.1 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request.

The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, will not be a cause for a time extension to the contract completion date.

3.7.2 Submission Requirements

The Contractor shall submit a justification for each request for a change in the contract completion date of under 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

- a. A list of affected activities, with their associated project schedule activity number.
- b. A brief explanation of the causes of the change.
- c. An analysis of the overall impact of the changes proposed.
- d. A sub-network of the affected area.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

3.7.3 Additional Submission Requirements

For any requested time extension of over 2 weeks, the Contracting Officer may request an interim update with revised activities for a specific change request. The Contractor shall provide this disk within 4 days of the Contracting Officer's request.

3.8 DIRECTED CHANGES

If the NTP is issued for changes prior to settlement of price and/or time, the Contractor shall submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The proposed revisions to the schedule will be approved by the Contracting Officer prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. The Contractor shall include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

3.9 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

- 1.1 SUBMITTAL IDENTIFICATION
- 1.2 SUBMITTAL CLASSIFICATION
 - 1.2.1 Government Approved
 - 1.2.2 Information Only
- 1.3 APPROVED SUBMITTALS
- 1.4 DISAPPROVED SUBMITTALS
- 1.5 WITHHOLDING OF PAYMENT

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 SUBMITTAL REGISTER (ENG FORM 4288)
- 3.3 SCHEDULING
- 3.4 TRANSMITTAL FORM (ENG FORM 4025)
- 3.5 SUBMITTAL PROCEDURE
 - 3.5.1 Procedures
 - 3.5.1.1 Computerized Submittal System
 - 3.5.1.2 Contractor Review
 - 3.5.1.3 Number of Copies
 - 3.5.1.4 Address to Receive Submittals
 - 3.5.1.5 Additional Government Approved Submittals
 - 3.5.1.6 Certificates of Compliance
 - 3.5.1.7 Special Reviews
 - 3.5.2 Deviations
- 3.6 CONTROL OF SUBMITTALS
- 3.7 GOVERNMENT APPROVED SUBMITTALS
- 3.8 INFORMATION ONLY SUBMITTALS
- 3.9 STAMPS

-- End of Section Table of Contents --

SECTION 01330
SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUBMITTAL IDENTIFICATION

Submittals required are identified by SD numbers as follows:

SD-01 Data
SD-04 Drawings
SD-06 Instructions
SD-07 Schedules
SD-08 Statements
SD-09 Reports
SD-13 Certificates
SD-14 Samples
SD-18 Records
SD-19 Operation and Maintenance Manuals

1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.2.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.2.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.3 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the CQC requirements of this

contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.4 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.5 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) representative and each item shall be stamped, signed, and dated by the CQC representative indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

3.2 SUBMITTAL REGISTER (ENG FORM 4288)

At the end of this section is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor will also be given the submittal register as a diskette containing the computerized ENG Form 4288 and instructions on the use of the diskette. Columns "d" through "r" have been completed by the Government; the Contractor shall complete columns "a" and "s" through "u" and submit the forms (hard copy plus associated electronic file) to the Contracting Officer for approval within 30 calendar

days after Notice to Proceed. The Contractor shall keep this diskette up-to-date and shall submit it to the Government together with the monthly payment request. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated.

3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals. An additional 60 calendar days shall be allowed and shown on the register for review and approval of submittals for refrigeration and HVAC control systems, electrical systems, fire protection, and fire detection and alarm system submittals.

3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

3.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

3.5.1 Procedures

Submittals shall be made as follows:

3.5.1.1 Computerized Submittal System

The Contractor may, at his option, use a computer database system compatible with the Contracting Officer's computer system and transfer all updates by disk. Computerized versions shall reflect all information shown on ENG Forms 4288.

3.5.1.2 Contractor Review

The Contractor's quality control representative shall review the listing at least every 30 days and take appropriate action to maintain an effective and updated system. A copy of the register shall be maintained at the jobsite. Revised and/or updated registers shall be submitted to the Contracting Officer at least every 60 days in quadruplicate (complete register need not be provided, only those portions containing additions or changes).

3.5.1.3 Number of Copies

The Contractor shall provide one original and six copies of all submittals.

3.5.1.4 Address to Receive Submittals

The Resident Engineer, assigned to the project by the Corps of Engineers, will provide the addresses where submittals will be sent by the contractor.

3.5.1.5 Additional Government Approved Submittals

In addition to those specified in PART 1 paragraph SUBMITTAL CLASSIFICATION, the following classifications of submittals also require Governmental approval:

Mechanical and Electrical Systems, and Fire Protection and Fire Detection Submittals.

See paragraph "Special Reviews."

3.5.1.6 Certificates of Compliance

Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in the number of copies required by the above paragraph "Number of Copies." Each certificate shall be signed by an official authorized to certify in behalf of the manufacturing company and shall contain the name and address of the Contractor, the project name and location, and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material, if, after tests are performed on selected samples, the material is found not to meet the specific requirements.

3.5.1.7 Special Reviews

- a. Fire Protection/Detection Submittals: The Contractor shall prepare and submit, as one integrated submittal, shop drawings for the fire protection/detection system. This submittal shall also include sprinkler plans and sections, fire detection and alarm plans and risers, and catalog cuts of proposed equipment. The Contractor shall submit proof that the shop drawings were prepared by an engineer regularly engaged in fire protection/detection systems for at least 2 years, and that they are sealed by a registered professional engineer. Shop drawings for the fire protection/detection system shall be prepared on full-size mylar sheets. The shop drawings submitted for review shall be submitted on full-size blue-line sheets. After updating all deviations, modifications, and changes, the final submittal shall be on mylar sheets and will represent the final as-built drawings.
- b. Mechanical and Electrical Systems: The Contractor shall furnish one reproducible, unfolded copy of all wiring and control diagrams and approved system layout drawings with the operating instructions called for under the various headings of these specifications for mechanical and electrical systems.

3.5.2 Deviations

For submittals which include proposed deviations requested by the

Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. One copies of the submittal will be retained by the Contracting Officer and the remaining copies of the submittal will be returned to the Contractor.

3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

3.9 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

CONTRACTOR	
(Firm Name)	
_____	Approved
_____ Approved with corrections as noted on submittal data and/or attached sheets(s).	
SIGNATURE: _____	
TITLE: _____	
DATE: _____	

-- End of Section --

(ER 415 1-10)

DACA09-99-B-0014

SPECIFICATION SECTION

CONTROL TOWER LUKE AFB, AZ

ACTIVITY
NO

TRANS-
MITTAL
NO.

ITEM NO

SPECIFI-
ATION
PARAGRAPH
NUMBER

DESCRIPTION OF
ITEM SUBMITTED

TYPE OF SUBMITTAL

CLASSI FICATION

CONTRACTOR
SCHEDULE DATES

CONTRACTOR
ACTION

GOVERNMENT ACTION

[illegible]

REVIEWER

SUBMIT

APPROVAL
NEEDED
BY

MATERIAL
NEEDED
BY

CODE

DATE _____

SUBMIT
TO
GOVERN
MENT

CODE

DATE _____

REMARKS

a.

b.

C.

Work Plan

e.

f	g	h	i	j	k	l	m	n	o	p	q
---	---	---	---	---	---	---	---	---	---	---	---

r.

5.

t.

u.

V.

W.

x.

ly

Z

aa.

(ER 415 1-10)

DACA09-99-B-0014

SPECIFICATION SECTION

CONTROL TOWER LUKE AFB, AZ

[illegible]

(ER 415 1-10)

CONTRACT NO.	
--------------	--

DACA09-99-B-0014

TITLE AND LOCATION

CONTRACTOR	
------------	--

SPECIFICATION SECTION

02316

CONTROL TOWER LUKE AFB, AZ

SUBMITTAL REGISTER

(BR 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

02364

ACTIVITY NO.	TRANS-MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL													CLASSIFICATION	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
					DRAWINGS	INSTRUMENTS	STANDARD	TESTS	CALCULATIONS	REVISIONS	FIELD	CONSTRUCTION	MATERIAL	METHOD	EQUIPMENT	ENVIRONMENT	OTHER		SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERNMENT	CODE	DATE	
a.	b.	c.	d.	e.	f	g	h	i	j	k	l	m	n	o	p	q	r	s.	t.	u.	v.	w.	x.	y.	z.	aa.	
			2.1	Termiticides				X																			
			1.1	Equipment					X																		
			3.2.3	Foundation Exterior						X																	
			1.1	Utilities and Vents						X																	
			1.1	Crawl and Plenum Air Spaces						X																	
			3.3.1	Soil Moisture						X																	
			3.5	Verification of Measurement						X																	
			1.1	Equipment Calibration and Tank Calibration							X																
			1.2	Qualifications								X															
			2.1	Termiticides									X														
			1.1	Termiticide Application Plan										X													

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTRACTOR	
------------	--

SPECIFICATION SECTION

02466

CONTROL TOWER LUKE AFB, AZ

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

SPECIFICATION SECTION

CONTROL TOWER LUKE AFB, AZ

ACTIVITY
NO

TRANS-
MITTAL
NO.

ITEM

SPECIFI-
ATION
PARAGRAPH
NUMBER

DESCRIPTION OF
ITEM SUBMITTED

TYPE OF SUBMITTAL

CLASSI FICATION

CONTRACTOR
SCHEDULE DATES

CONTRACTOR
ACTION

GOVERNMENT ACTION	
----------------------	--

SUBMIT

APPROVAL
NEEDED
BY

MATERIAL
NEEDED
BY

CODE

DATE _____

SUBMIT
TO
GOVERN
MENT

<div style="display: flex; justify-content: space-between;"> <div> <p> 1 </p> <p> 2 </p> <p> 3 </p> <p> 4 </p> <p> 5 </p> <p> 6 </p> <p> 7 </p> <p> 8 </p> <p> 9 </p> <p> 10 </p> <p> 11 </p> <p> 12 </p> <p> 13 </p> <p> 14 </p> <p> 15 </p> <p> 16 </p> <p> 17 </p> <p> 18 </p> <p> 19 </p> <p> 20 </p> <p> 21 </p> <p> 22 </p> <p> 23 </p> <p> 24 </p> <p> 25 </p> <p> 26 </p> <p> 27 </p> <p> 28 </p> <p> 29 </p> <p> 30 </p> <p> 31 </p> <p> 32 </p> <p> 33 </p> <p> 34 </p> <p> 35 </p> <p> 36 </p> <p> 37 </p> <p> 38 </p> <p> 39 </p> <p> 40 </p> <p> 41 </p> <p> 42 </p> <p> 43 </p> <p> 44 </p> <p> 45 </p> <p> 46 </p> <p> 47 </p> <p> 48 </p> <p> 49 </p> <p> 50 </p> <p> 51 </p> <p> 52 </p> <p> 53 </p> <p> 54 </p> <p> 55 </p> <p> 56 </p> <p> 57 </p> <p> 58 </p> <p> 59 </p> <p> 60 </p> <p> 61 </p> <p> 62 </p> <p> 63 </p> <p> 64 </p> <p> 65 </p> <p> 66 </p> <p> 67 </p> <p> 68 </p> <p> 69 </p> <p> 70 </p> <p> 71 </p> <p> 72 </p> <p> 73 </p> <p> 74 </p> <p> 75 </p> <p> 76 </p> <p> 77 </p> <p> 78 </p> <p> 79 </p> <p> 80 </p> <p> 81 </p> <p> 82 </p> <p> 83 </p> <p> 84 </p> <p> 85 </p> <p> 86 </p> <p> 87 </p> <p> 88 </p> <p> 89 </p> <p> 90 </p> <p> 91 </p> <p> 92 </p> <p> 93 </p> <p> 94 </p> <p> 95 </p> <p> 96 </p> <p> 97 </p> <p> 98 </p> <p> 99 </p> <p> 100 </p> </div> <div> <p> 101 </p> <p> 102 </p> <p> 103 </p> <p> 104 </p> <p> 105 </p> <p> 106 </p> <p> 107 </p> <p> 108 </p> <p> 109 </p> <p> 110 </p> <p> 111 </p> <p> 112 </p> <p> 113 </p> <p> 114 </p> <p> 115 </p> <p> 116 </p> <p> 117 </p> <p> 118 </p> <p> 119 </p> <p> 120 </p> <p> 121 </p> <p> 122 </p> <p> 123 </p> <p> 124 </p> <p> 125 </p> <p> 126 </p> <p> 127 </p> <p> 128 </p> <p> 129 </p> <p> 130 </p> <p> 131 </p> <p> 132 </p> <p> 133 </p> <p> 134 </p> <p> 135 </p> <p> 136 </p> <p> 137 </p> <p> 138 </p> <p> 139 </p> <p> 140 </p> <p> 141 </p> <p> 142 </p> <p> 143 </p> <p> 144 </p> <p> 145 </p> <p> 146 </p> <p> 147 </p> <p> 148 </p> <p> 149 </p> <p> 150 </p> <p> 151 </p> <p> 152 </p> <p> 153 </p> <p> 154 </p> <p> 155 </p> <p> 156 </p> <p> 157 </p> <p> 158 </p> <p> 159 </p> <p> 160 </p> <p> 161 </p> <p> 162 </p> <p> 163 </p> <p> 164 </p> <p> 165 </p> <p> 166 </p> <p> 167 </p> <p> 168 </p> <p> 169 </p> <p> 170 </p> <p> 171 </p> <p> 172 </p> <p> 173 </p> <p> 174 </p> <p> 175 </p> <p> 176 </p> <p> 177 </p> <p> 178 </p> <p> 179 </p> <p> 180 </p> <p> 181 </p> <p> 182 </p> <p> 183 </p> <p> 184 </p> <p> 185 </p> <p> 186 </p> <p> 187 </p> <p> 188 </p> <p> 189 </p> <p> 190 </p> <p> 191 </p> <p> 192 </p> <p> 193 </p> <p> 194 </p> <p> 195 </p> <p> 196 </p> <p> 197 </p> <p> 198 </p> <p> 199 </p> <p> 200 </p> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div> <p> 1 </p> <p> 2 </p> <p> 3 </p> <p> 4 </p> <p> 5 </p> <p> 6 </p> <p> 7 </p> <p> 8 </p> <p> 9 </p> <p> 10 </p> <p> 11 </p> <p> 12 </p> <p> 13 </p> <p> 14 </p> <p> 15 </p> <p> 16 </p> <p> 17 </p> <p> 18 </p> <p> 19 </p> <p> 20 </p> <p> 21 </p> <p> 22 </p> <p> 23 </p> <p> 24 </p> <p> 25 </p> <p> 26 </p> <p> 27 </p> <p> 28 </p> <p> 29 </p> <p> 30 </p> <p> 31 </p> <p> 32 </p> <p> 33 </p> <p> 34 </p> <p> 35 </p> <p> 36 </p> <p> 37 </p> <p> 38 </p> <p> 39 </p> <p> 40 </p> <p> 41 </p> <p> 42 </p> <p> 43 </p> <p> 44 </p> <p> 45 </p> <p> 46 </p> <p> 47 </p> <p> 48 </p> <p> 49 </p> <p> 50 </p> <p> 51 </p> <p> 52 </p> <p> 53 </p> <p> 54 </p> <p> 55 </p> <p> 56 </p> <p> 57 </p> <p> 58 </p> <p> 59 </p> <p> 60 </p> <p> 61 </p> <p> 62 </p> <p> 63 </p> </div></div>
---	---

DATE _____

REMARKS

22.

(ER 415 1-10)

DACA09-99-B-0014

CONTRACTOR	
------------	--

02748

CONTROL TOWER LUKE AFB, AZ

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR	
------------	--

	SPECIFICATION SECTION
--	-----------------------

02770

[illegible]

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR	
------------	--

SPECIFICATION SECTION								
-----------------------	--	--	--	--	--	--	--	--

03300

[illegible]

SUBMITTAL REGISTER

(2R 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

03415

ACTIVITY NO	TRANS-MITTAL NO.	ITEM NO	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL													CLASSIFICATION	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
					f	g	h	i	j	k	l	m	n	o	p	q	r		s	t	u	v	w	x	y	z	
a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.	l.	m.	n.	o.	p.	q.	r.	s.	t.	u.	v.	w.	x.	y.	z.	aa.	
			1.3	Structural precast manufacturers' qualifications	X											X											
			1.2.2.3	Design Calculations	X											X											
			2.2.2	Concrete Mixture Proportions	X											X											
			1.3	Shop Drawings		X										X											
			2.1	Materials						X						X											
			1.2.3.1	Concrete						X						X											
			2.1.1	Cement						X						X											
			2.1.3.2	Air-Entraining Admixture						X						X											
			2.1.3.2	Water- Reducing Admixture						X						X											
			2.1.3.2	Accelerating Admixture						X						X											
			2.1.3.1	Aggregates						X						X											
			1.2.3.2	Air Content						X				X													
			1.4	Precast Concrete Panel						X						X											
			3.9	Construction Records								X		X													

(ER 415 1-10)

DACA09-99-B-0014

CONTROL TOWER LUKE AFB, AZ

SPECIFICATION SECTION

05120

(ER 415 1-10)

DACA09-99-B-0014

CONTRACTOR

05300

CONTROL TOWER LUKE AFB, AZ

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTRACTOR

SPECIFICATION SECTION

05500

CONTROL TOWER LUKE AFB, AZ

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

CONTRACTOR

06410

ACTIVITY
NO. a.

ITEM NO.

DESCRIPTION OF
ITEM SUBMITTED

CLASSI FICATION	
--------------------	--

CONTRACTOR
ACTION

GOVERNMENT
ACTION

REMARKS

C.

e.

51.

x.

--	--

[illegible]

--	--

--	--

(ER 415 1-10)

DACA09-99-B-0014

CONTRACTOR

07220

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

CONTROL TOWER LUKE AFB, AZ

SPECIFICATION SECTION

07275

ACTIVITY
NO

TRANS-
MITTAL
NO.

ITEM NO

SPECIFI-
ATION
PARAGRAPH
NUMBER

DESCRIPTION OF
ITEM SUBMITTED

TYPE OF SUBMITTAL

CLASSI FICATION

CONTRACTOR
SCHEDULE DATES

CONTRACTOR
ACTION

GOVERNMENT ACTION	
----------------------	--

[illegible]

REVUE

SUBMIT

APPROVAL
NEEDED
BY

MATERIAL
NEEDED
BY

CH
CH
I
H

DATE _____

SUBMIT
TO
GOVERN
MENT

1000

DATE _____

REMARKS

aa.

(ER 415 1-10)

DACA09-99-B-0014

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

07551

ACTIVITY NO

TRANS-
MITTAL
NO.

ITEM

SPECIFI-
ATION
PARAGRAPH
NUMBER

DESCRIPTION OF
ITEM SUBMITTED

TYPE OF SUBMITTAL

CLASSI
FICATION

CONTRACTOR
SCHEDULE DATES

CONTRACTOR
ACTION

GOVERNMENT
ACTION

D	I	O	C	O	I	G	A
R	N	S	R	M	N	V	P
A	T	T	E	R	F	E	R
D	R	E	R	S	M	R	P
A	C	E	E	C	A	O	M
T	T	E	R	O	N	N	O
A	I	E	T	A	I	O	V
S	O	S	T	P	N	L	E
S	L	S	T	L	O	E	N
S	E	S	E	E	N	D	T

REVIEWER

SUBMIT

APPROVAL
NEEDED
BY

MATERIAL
NEEDED
BY

C
O
D
E

DATE _____

SUBMIT
TO
GOVERN
MENT

CODE

DATE _____

REMARKS

aa.

(ER 415 1-10)

DACA09-99-B-0014

CONTRACTOR

07600

ACTIVITY
NO. a.

ITEM NO. C.

REMARKS

Materials

X

3

REMARKS

(ER 415 1-10)

DACA09-99-B-0014

SPECIFICATION SECTION

CONTROL TOWER LUKE AFB, AZ

PAGE 1 OF 1 PAGES

(ER 415 1-10)

DACA09-99-B-0014

CONTRACTOR

07840

ACTIVITY
NO

ITEM NO

DESCRIPTION OF
ITEM SUBMITTED

CLASSI
FICATION

CONTRACTOR
ACTION

GOVERNMENT
ACTION

e.

X

	X
--	---

APPROVAL
NEEDED
BY

MATERIAL
NEEDED
BY

CONFIDENTIAL

SUBMIT
TO
GOVERN
MENT

C
C
I
E

REMARKS

aa.

(ER 415 1-10)

CONTRACT NO.	
--------------	--

DACA09-99-B-0014

TITLE AND LOCATION	DATE	TIME	PERSONS	REMARKS
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
21.
22.
23.
24.
25.
26.
27.
28.
29.

CONTRACTOR	
------------	--

SPECIFICATION SECTION

07900

CONTROL TOWER LUKE AFB, AZ

[illegible]

(ER 415 1-10)

CONTRACT NO.	
--------------	--

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

08120

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

CONTROL TOWER LUKE AFB, AZ

SPECIFICATION SECTION

08700

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

CONTRACTOR

08810

CONTROL TOWER LUKE AFB, AZ

[illegible]

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

09250

ACTIVITY NO.	TRANS-MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL													CLASSIFICATION	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
					D	I	N	S	T	S	C	E	R	T	I	O	&		M	F	O	I	N	G	O	V		A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E	R	S	U	B	M	T	O	M	O	V	A	R	E	V	I	E	W	E

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR	
------------	--

SPECIFICATION SECTION

09310

[illegible]

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

09650

ACTIVITY NO	TRANS-MITTAL NO.	ITEM NO	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL													CLASSIFICATION	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
					D	I	N	S	T	S	C	E	R	O	I	G	R		S	M	A	P	O	U	T	O		M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V	E	R	S	M	A	P	O	U	T	O	M	O	N	E	V

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTRACTOR

SPECIFICATION SECTION

09680

CONTROL TOWER LUKE AFB, AZ

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

TITLE AND LOCATION

CONTRACTOR

SPECIFICATION SECTION

09720

CONTROL TOWER LUKE AFB, AZ

PAGE 1 OF 1 PAGES

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTRACTOR

SPECIFICATION SECTION

09900

CONTROL TOWER LUKE AFB, AZ

[illegible]

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

09980

ACTIVITY NO a.	TRANS-MITTAL NO. b.	ITEM NO c.	SPECIFICATION PARAGRAPH NUMBER d.	DESCRIPTION OF ITEM SUBMITTED e.	TYPE OF SUBMITTAL													CLASSIFICATION f.	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS aa.									
					f	g	h	i	j	k	l	m	n	o	p	q	r		s	t	u	v	w	x	y	z										
																												DRAWING	INSTRUCTIONS	STANDARD	CERTIFICATION	OTHER	INFORMATION	GOVERNMENT	REVIEW	SUBMIT
			1.2	Elastomeric Coating	X																															
			1.2	Mixing and Thinning		X																														
			1.2	Application		X																														
			1.2	Elastomeric Coating					X																											
			1.2	Lead						X																										
			1.2	Mildewcide and Insecticide						X																										
			1.2	Volatile Organic Compound (VOC)						X																										
				Content																																
			1.2	Elastomeric Coatings							X																									

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTRACTOR

SPECIFICATION SECTION

10100

CONTROL TOWER LUKE AFB, AZ

[illegible]

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

10270

ACTIVITY NO.	TRANS-MITTAL NO.	ITEM NO.	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL													CLASSIFICATION	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
					D	I	N	S	T	R	C	E	R	T	I	C	E		R	M	O	I	N	F	O	V		A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M	A	T	O	M	O	V	A	R	P	E	M

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.
DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

10442

ACTIVITY NO a.	TRANS-MITTAL NO. b.	ITEM NO c.	SPECIFICATION PARAGRAPH NUMBER d.	DESCRIPTION OF ITEM SUBMITTED e.	TYPE OF SUBMITTAL													CLASSIFICATION f.	REVIEWER r.	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS aa.							
					f	g	h	i	j	k	l	m	n	o	p	q	s			t	u	v	w	x	y	z									
																											DRAWINGS		INSTRUCTIONS	STANDARD	CERTIFICATION	OTHER	GOVERNMENT	APPROVAL	MATERIAL
			1.2	Interior Signage	X											X																			
			1.2	Interior Signage	X											X																			
			1.2	Installation Procedures		X										X																			
			1.2	Sign Schedule			X									X																			
			1.2	Qualifications				X								X																			
			1.2	Interior Signage						X						X																			
			1.2	Sign Maintenance Instructions									X	X																					

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTRACTOR

SPECIFICATION SECTION

10800

CONTROL TOWER LUKE AFB, AZ

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR	
------------	--

SPECIFICATION SECTION

12490

[illegible]

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

SPECIFICATION SECTION

12513

TITLE AND LOCATION

CONTRACTOR

CONTROL TOWER LUKE AFB, AZ

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

13100

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

13110

ACTIVITY
NO. a.

ITEM NO. C.

DESCRIPTION OF
ITEM SUBMITTED

CLASSI
FICATION

GOVERNMENT
ACTION

CODE

CODE

REMARKS

aa.

X

X

	X
--	---

X

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

SPECIFICATION SECTION

13280

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

TITLE AND LOCATION					CONTRACTOR													CONTRACTOR			GOVERNMENT		REMARKS			
CONTROL TOWER LUKE AFB, AZ					SCHEDULE DATES													ACTION			ACTION		aa.			
ACTIVITY NO.	TRANS-MITTAL NO.	ITEM NO.	SPECIFI-ATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL													SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERNMENT	CODE	DATE	REMARKS
					DRAWINGS	INSTRUMENTS	START DATE	CERTIFICATES	REVISIONS	FORMS	INFORMATION	GOVERNMENT	REVIEWER	SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	CODE									
a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.	l.	m.	n.	o.	p.	q.	r.	s.	t.	u.	v.	w.	x.	y.	z.	aa.
			1.4	Materials and Equipment	X											X										
			1.4	Site Layout	X											X										
			1.5	Qualifications					X							X										
			1.11	Training Program					X							X										
			1.10	Medical Requirements					X								X									
			2.1	Encapsulants							X						X									
			3.7	Exposure Assessment and Air Monitoring								X				X										
			1.20	Local Exhaust Ventilation							X						X									
			1.14	Licenses, Permits and Notifications								X				X										
			1.4	Vacuum, Filtration and Ventilation Equipment											X		X									
			1.12	Respiratory Protection Program											X		X									
			3.9	Cleanup and Disposal																						

(ER 415 1-10)

DACA09-99-B-0014

13851

CONTRACTOR

CONTROL TOWER LUKE AFB, AZ

PAGE 1 OF 1 PAGES

SUBMITTAL REGISTER

(BR 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

15895

ACTIVITY NO	TRANSMITTAL NO.	ITEM NO	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL												CLASSIFICATION	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS
					DRAWINGS	INSTRUMENTS	STRUCTURES	SPECIALTIES	CERTIFICATES	REPAIRS	O&M	INFORMATION	GOVERNMENT	REVIEWER	SUBMIT	APPROVAL NEEDED BY		MATERIAL NEEDED BY	CODE	DATE	SUBMIT TO GOVERNMENT	CODE	DATE			
																								f	g	
a.	b.	c.	d.	e.	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	aa.
			1.4	Components and Equipment Data	X										X											
			1.4	Air Supply, Distribution, Ventilation, and Exhaust	X										X											
			1.4	Test Procedures		X									X											
			1.4	Welding Procedures		X									X											
			1.4	System Diagrams		X										X										
			1.4	Test Schedules			X								X											
			1.4	Field Training Schedule			X								X											
			1.4	Similar Services				X							X											
			1.4	Welding Qualification				X							X											
			1.4	Test Reports					X						X											
			1.4	Bolts						X					X											
			1.4	Air Supply, Distribution, Ventilation, and Exhaust										X	X											

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

15990

ACTIVITY NO. a.	TRANS-MITTAL NO. b.	ITEM NO. c.	SPECIFICATION PARAGRAPH NUMBER d.	DESCRIPTION OF ITEM SUBMITTED e.	TYPE OF SUBMITTAL													CLASSIFICATION f.	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS aa.								
					f.	g.	h.	i.	j.	k.	l.	m.	n.	o.	p.	q.	r.		s.	t.	u.	v.	w.	x.	y.	z.									
																												INSTRUMENT DRAWING	STANDARD	CERTIFICATE	OTHER	INFORMATION	GOVERNMENT	REVIEW	APPROVAL
			1.2	TAB Related HVAC Submittals	X												X																		
			1.2	TAB Schematic Drawings and Report Forms	X													X																	
			1.2	TAB Procedures			X											X																	
			1.2	Systems Readiness Check				X										X																	
			1.2	TAB Execution				X										X																	
			1.2	TAB Verification				X										X																	
			1.2	TAB Firm					X									X																	
			1.2	TAB Specialist					X									X																	
			1.2	Instrument Calibration					X								X																		
			1.2	Design Review Report						X								X																	
			1.2	Systems Readiness Check Report						X								X																	
			1.2	TAB Report						X								X																	
			1.2	TAB Verification Report						X								X																	
			1.2	Ductwork Leak Testing							X						X																		

(ER 415 1-10)

DACA09-99-B-0014

15995

PAGE 1 OF 1 PAGES

SUBMITTAL REGISTER

(BR 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

16113

ACTIVITY NO	TRANS-MITTAL NO.	ITEM NO	SPECIFI- ATION PARAGRAPH NUMBER	DESCRIPTION OF ITEM SUBMITTED	TYPE OF SUBMITTAL													CLASSI- FICATION	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS																			
					D	I	N	S	T	R	C	E	R	T	I	C	E		R	M	R	O	I	N	G	O		V	A	R	E	V	I	E	W	E	R	S	T	U	V	W	X	Y	Z	AA
a.	b.	c.	d.	e.	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	aa																				
			1.2	Trench Duct	X											X																														
			3.1	Duct System	X											X																														
			1.2	Equipment and Materials			X								X																															
			3.1	Duct System										X		X																														

(ER 415 1-10)

DACA09-99-B-0014

16263

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

16263

CONTRACTOR

ACTIVITY
NO a

TRANS-
MITTAL
NO.

ITEM NO

SPECIFI-
ATION
PARAGRAPH
NUMBER

DESCRIPTION OF
ITEM SUBMITTED

TYPE OF SUBMITTAL

CLASSI
FICATION

CONTRACTOR
SCHEDULE DATES

CONTRACTOR
ACTION

GOVERNMENT
ACTION

SUBMIT
TO
GOVERN
MENT

C
C
D
E
Y

DATE _____

Z .

REMARKS

aa.

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

16375

ACTIVITY NO a.	TRANS-MITTAL NO. b.	ITEM NO c.	SPECIFICATION PARAGRAPH NUMBER d.	DESCRIPTION OF ITEM SUBMITTED e.	TYPE OF SUBMITTAL													CLASSIFICATION p.	REVIEWER r.	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS aa.									
					f.	g.	h.	i.	j.	k.	l.	m.	n.	o.	q.	s.	t.			u.	v.	w.	x.	y.	z.												
																										INSTRUMENTS	STANDARD		CERTIFICATION	OTHER	GOVERNMENT	CONTRACTOR	DATE	DATE	DATE		
			1.3	Manufacturer's Catalog Data	X												X																				
			1.3	Material, Equipment, and Fixture Lists	X												X																				
			1.3	Installation Procedures	X												X																				
			1.3	Electrical Distribution System	X												X																				
			1.3	As-Built Drawings	X												X																				
			1.3	Factory Test						X							X																				
			1.3	Field Testing						X							X																				
			1.3	Test Reports						X							X																				
			1.3	Cable Installation Reports						X							X																				
			1.3	Materials and Equipment						X							X																				
			1.3	Cable Installer Qualifications						X							X																				
			1.3	Electrical Distribution System										X	X																						

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.	
--------------	--

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR	
------------	--

SPECIFICATION SECTION

16410

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

SPECIFICATION SECTION

16475

[illegible]

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

16526

ACTIVITY NO. a.	TRANS-MITTAL NO. b.	ITEM NO. c.	SPECIFICATION PARAGRAPH NUMBER d.	DESCRIPTION OF ITEM SUBMITTED e.	TYPE OF SUBMITTAL													CLASSIFICATION f.	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION		GOVERNMENT ACTION		REMARKS aa.									
					f.	g.	h.	i.	j.	k.	l.	m.	n.	o.	p.	q.	r.		s.	t.	u.	v.	w.	x.	y.		z.								
																												INS	ST	CERT	INF	GO	REVIEW	APPROVAL	MATERIAL
			1.4	Materials and Equipment	X												X																		
			1.4	Protection Plan	X												X																		
			1.4	Training	X												X																		
			1.4	Special Tools	X												X																		
			1.4	Parts List	X												X																		
			1.4	As-Built Drawings		X												X																	
			1.4	Repair Requirements			X											X																	
			1.4	Posted Instructions			X											X																	
			1.4	Test Results					X									X																	
			1.4	Inspection					X									X																	
			1.4	Qualifications						X								X																	
			1.4	Materials and Equipment						X				X																					
			1.4	Equipment									X		X			X																	

(ER 415 1-10)

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR	
------------	--

SPECIFICATION SECTION

16710

[illegible]

(ER 415 1-10)

DACA09-99-B-0014

CONTRACTOR

16768

ACTIVITY
NO. a.

ITEM NO. C.

DESCRIPTION OF
ITEM SUBMITTED

CLASSI
FICATION

CONTRACTOR
ACTION

GOVERNMENT
ACTION

D	I	N	S	S	S	C	E	R	T	I	O	I	G
R	U	C	H	E	E	R	F	I	E	M	N	F	O
A	W	T	I	U	E	P	S	A	E	C	R	M	V
D	I	I	O	N	E	P	O	R	M	A	T	O	E
A	N	G	S	S	S	S	S	S	S	S	S	S	S
f	g	h	i	j	k	l	m	n	o	p	q		

MATERIAL
NEEDED
BY

C
O
D
E
V

SUBMIT
TO
GOVERN
MENT

C
C
D
E
y

DATE _____

REMARKS

1.4	Fiber Optic System
1.4	Spare Parts
1.4	Fiber Optic System
1.4	Manufacturers' Recommendations
1.4	Operation and Maintenance
	Instructions
1.4	Test Plans
1.4	Test Reports

X						X	
X						X	
	X						X
		X					X
		X				X	
			X				X
				X			
					X		

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

TITLE AND LOCATION

CONTRACTOR

SPECIFICATION SECTION

[illegible]

SUBMITTAL REGISTER

(ER 415 1-10)

CONTRACT NO.

DACA09-99-B-0014

TITLE AND LOCATION

CONTROL TOWER LUKE AFB, AZ

CONTRACTOR

SPECIFICATION SECTION

04200

ACTIVITY NO a.	TRANS-MITTAL NO. b.	ITEM NO c.	SPECIFICATION PARAGRAPH NUMBER d.	DESCRIPTION OF ITEM SUBMITTED e.	TYPE OF SUBMITTAL													CLASSIFICATION p.	REVIEWER r.	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			GOVERNMENT ACTION		REMARKS aa.							
					f	g	h	i	j	k	l	m	n	o	q	s	t			u	v	w	x	y	z										
																										INSTRUMENTS DRAWINGS	STANDARD SPECIFICATIONS		CONSTRUCTION METHODS	OTHER SUBMITTALS	CONTRACTOR SCHEDULE DATES	CONTRACTOR ACTION	GOVERNMENT ACTION		
			1.2	Concrete Slump Block	X												X																		
			1.2	Masonry Work	X												X																		
			3.1.2	Cold Weather Installation					X								X																		
			3.11.1	Field Testing of Mortar					X								X																		
			3.11.2	Field Testing of Grout					X								X																		
			1.2	Masonry Cement					X								X																		
			1.4	Special Inspection					X								X																		
			1.2	Concrete Slump Block							X						X																		
			2.5	Anchors, Ties, and Bar Positioners							X						X																		
			2.7	Expansion-Joint Materials							X						X																		
			1.2	Joint Reinforcement							X						X																		
			1.2	Masonry Cement							X						X																		
			1.2	Mortar Coloring							X						X																		
			1.2	Insulation							X						X																		
			1.2	Precast Concrete Items							X						X																		
			1.2	Mortar Admixtures							X						X																		
			1.2	Grout Admixtures							X						X																		
			1.2	Glass Block Units and Accessories							X						X																		
			1.2	Ceramic Glazed Structural Clay Facing Units							X						X																		
			1.2	Concrete Slump Block Masonry Units (CMU)								X					X																		
			2.5	Anchors, Ties, and Bar Positioners								X					X																		
			1.2	Expansion-Joint Material							X						X																		

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01410

ENVIRONMENT PROTECTION

- 1.1 GENERAL REQUIREMENTS
 - 1.1.1 Subcontractors
 - 1.1.1.1 Environmental Protection Plan
 - 1.1.1.2 Permits
 - 1.1.1.3 Preconstruction Survey
 - 1.1.1.4 Meetings
 - 1.1.1.5 Notification
 - 1.1.1.6 Litigation
 - 1.1.1.7 Previously Used Equipment
 - 1.1.1.8 Payment
 - 1.1.2 LAND RESOURCES
 - 1.1.2.1 Work Area Limits
 - 1.1.2.2 Landscape
 - 1.1.2.3 Unprotected Erodible Soils
 - 1.1.2.4 Disturbed Areas
 - 1.1.2.5 [Enter Appropriate Subpart Title Here]
 - 1.1.3 WATER RESOURCES
 - 1.1.3.1 Washing and Curing Water
 - 1.1.3.2 Cofferdam and Diversion Operations
 - 1.1.3.3 Stream Crossings
 - 1.1.3.4 Fish and Wildlife
 - 1.1.4 AIR RESOURCES
 - 1.1.4.1 Particulates
 - 1.1.4.2 Hydrocarbons and Carbon Monoxide
 - 1.1.4.3 Odors
 - 1.1.4.4 Sound Intrusions
 - 1.1.5 WASTE DISPOSAL
 - 1.1.5.1 Solid Wastes
 - 1.1.5.2 Chemical Wastes
 - 1.1.5.3 Hazardous Wastes
 - 1.1.5.4 Burning
 - 1.1.6 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES
 - 1.1.7 POST CONSTRUCTION CLEANUP
 - 1.1.8 RESTORATION OF LANDSCAPE DAMAGE
 - 1.1.9 MAINTENANCE OF POLLUTION FACILITIES
 - 1.1.10 TRAINING OF CONTRACTOR PERSONNEL

-- End of Section Table of Contents --

SECTION 01410

ENVIRONMENT PROTECTION

1.1 GENERAL REQUIREMENTS

The Contractor shall perform the work minimizing environmental pollution and damage as the result of construction operations. Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the utility of the environment for aesthetic, cultural and/or historical purposes. The control of environmental pollution and damage requires consideration of land, water, and air, and includes management of visual aesthetics, noise, solid waste, as well as other pollutants. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract.

1.1.1 Subcontractors

The Contractor shall ensure compliance with this section by subcontractors.

1.1.1.1 Environmental Protection Plan

The Contractor shall submit an environmental protection plan within 15 days after receipt of the notice to proceed. Approval of the Contractor's plan will not relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures. The environmental protection plan shall include, but shall not be limited to, the following:

- a. A list of Federal, State, and local laws, regulations, and permits concerning environmental protection, pollution control and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations, and permits.
- b. Methods for protection of features to be preserved within authorized work areas like trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, historical, archaeological, and cultural resources.
- c. Procedures to be implemented to provide the required environmental protection, to comply with the applicable laws and regulations, and to correct pollution due to accident, natural causes, or failure to follow the procedures of the environmental protection plan.
- d. Location of the solid waste collection area used prior to final disposal offsite.
- e. Drawings showing locations of any proposed temporary excavations or embankments for haul roads, stream crossings, material storage

areas, structures, sanitary facilities, and stockpiles of excess or spoil materials.

- f. Environmental monitoring plans for the job site, including land, water, air, and noise monitoring.
- g. Traffic control plan including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather, and the amount of mud transported onto paved public roads by vehicles or runoff.
- h. Methods of protecting surface and ground water during construction activities.(refer to the plan submitted by contractor for protecting storm drains)
- i. Plan showing the proposed activity in each portion of the work area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas.
- j. Drawing of borrow area location. Protection measures required at the work site shall apply to the borrow areas including final restoration for subsequent beneficial use of the land.
- k. A recycling and waste prevention/minimization plan with a list of measures to reduce consumption of energy and natural resources; for example: the possibility to shred fallen trees and use them as mulch shall be considered as an alternative to burning or burial.
- l. A settling pond removal plan 120 days prior to removal work. The plan shall include the method of removing and testing of the collected sediment.
- m. Training for Contractor's personnel during the construction period.
- n. A plan which includes drawings and methods of FOD control shall be submitted for approval to Luke's QA/project engineer prior to beginning of construction activities.

1.1.1.2 Permits

The Contractor shall obtain all needed permits or licenses. The Government will not obtain any permits for this project; see Contract Clause PERMITS AND RESPONSIBILITIES. The State department of natural resources, through the national pollutant discharge elimination system (NPDES), requires general permits, a notice of intent, and a notice of discontinuation. The Contractor shall be responsible for implementing the terms and requirements of the appropriate permits as needed and for payment of all fees.

1.1.1.3 Preconstruction Survey

Prior to starting any onsite construction activities, the Contractor and the Contracting Officer shall make a joint condition survey after which the Contractor shall prepare a brief report indicating on a layout plan the condition of trees, shrubs and grassed areas immediately adjacent to work sites and adjacent to the assigned storage area and access routes as applicable. This report will be signed by both the Contracting Officer and the Contractor upon mutual agreement as to its accuracy and completeness.

1.1.1.4 Meetings

The Contractor shall meet with representatives of the Contracting Officer to alter the environmental protection plan as needed for compliance with the environmental pollution control program.

1.1.1.5 Notification

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with the previously mentioned Federal, State or local laws or regulations, permits, and other elements of the Contractor's environmental protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of proposed corrective action and take such action when approved. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or costs or damages allowed to the Contractor for any such suspensions.

1.1.1.6 Litigation

If work is suspended, delayed, or interrupted due to a court order of competent jurisdiction, the Contracting Officer will determine whether the order is due in any part to the acts or omissions of the Contractor, or subcontractors at any tier, not required by the terms of the contract. If it is determined that the order is not due to Contractor's failing, such suspension, delay, or interruption shall be considered as ordered by the Contracting Officer in the administration of the contract under the contract clause SUSPENSION OF WORK.

1.1.1.7 Previously Used Equipment

The Contractor shall thoroughly clean all construction equipment previously used at other sites before it is brought into the work areas, ensuring that soil residuals are removed and that egg deposits from plant pests are not present; the Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

1.1.1.8 Payment

No separate payment will be made for work covered under this section; all costs associated with this section shall be included in the contract unit and/or lump sum prices in the Bidding Schedule.

1.1.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify the land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without permission. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such emergency use is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, earth or other material displaced into uncleared areas shall be removed.

1.1.2.1 Work Area Limits

Prior to any construction, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, the markers shall be visible. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

1.1.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

1.1.2.3 Unprotected Erodible Soils

Earthwork brought to final grade shall be finished as indicated. Side slopes and back slopes shall be protected as soon as practicable upon completion of rough grading. All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Except in cases where the constructed feature obscures borrow areas, quarries, and waste material areas, these areas shall not initially be totally cleared. Clearing of such areas shall progress in reasonably sized increments as needed to use the developed areas as approved by the Contracting Officer.

1.1.2.4 Disturbed Areas

The Contractor shall effectively prevent erosion and control sedimentation through approved methods including, but not limited to, the following:

- a. Retardation and control of runoff. Runoff from the construction site or from storms shall be controlled, retarded, and diverted to protected drainage courses by means of diversion ditches, benches, berms, and by any measures required by area wide plans under the Clean Water Act.
- b. Erosion and sedimentation control devices. The Contractor shall construct or install temporary and permanent erosion and sedimentation control features as indicated on the drawings. Berms, dikes, drains, sedimentation basins, grassing, and mulching shall be maintained until permanent drainage and erosion control facilities are completed and operative.
- c. Sediment basins. Sediment from construction areas shall be trapped in temporary or permanent sediment basins in accordance with the drawings. The basins shall accommodate the runoff of a local 5 year storm. After each storm, the basins shall be pumped dry and accumulated sediment shall be removed to maintain basin effectiveness. Overflow shall be controlled by paved weirs or by vertical overflow pipes. The collected topsoil sediment shall be reused for fill on the construction site, and/or stockpiled for use at another site. The Contractor shall institute effluent quality monitoring programs as required by State and local environmental agencies.

1.1.2.5 [Enter Appropriate Subpart Title Here]

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Borrow areas shall be managed to minimize erosion and to prevent sediment from entering nearby waters. Spoil areas shall be managed and controlled to limit spoil intrusion into areas designated on the drawings and to prevent erosion of soil or sediment from entering nearby waters. Spoil areas shall be developed in accordance with the grading plan indicated on the drawings. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas from despoilment.

1.1.3 WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

Stormwater drains close to the job site shall be protected from storm events. A plan for protection and monitoring shall be submitted for approval to the Luke AFB QA/project engineer.

Toxic or hazardous chemicals shall not be applied to soil or vegetation when such application may cause contamination of the fresh water reserve. Monitoring of water areas affected by construction shall be the Contractor's responsibility. All water areas affected by construction activities shall be monitored by the Contractor.

1.1.3.1 Washing and Curing Water

Waste waters directly derived from construction activities shall not be allowed to enter water areas. Waste waters shall be collected and placed in retention ponds where suspended material can be settled out or the water evaporates to separate pollutants from the water. Analysis shall be performed and results reviewed and approved before water in retention ponds is discharged.

1.1.3.2 Cofferdam and Diversion Operations

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure shall be controlled at all times to limit the impact of water turbidity on the habitat for wildlife and on water quality for downstream use.

1.1.3.3 Stream Crossings

Stream crossings shall allow movement of materials or equipment without violating water pollution control standards of the Federal, State or local government.

1.1.3.4 Fish and Wildlife

The Contractor shall minimize interference with, disturbance to, and damage of fish and wildlife. Species that require specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations.

1.1.4 AIR RESOURCES

Equipment operation and activities or processes performed by the Contractor in accomplishing the specified construction shall be in accordance with the State's rules and all Federal emission and performance laws and standards. Ambient Air Quality Standards set by the Environmental Protection Agency shall be maintained. Monitoring of air quality shall be the Contractor's responsibility. All air areas affected by the construction activities shall be monitored by the Contractor. Monitoring results will be periodically reviewed by the Government to ensure compliance.

1.1.4.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from asphaltic batch plants; shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, light bituminous treatment, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs.

The contractor shall obtain an earthmoving permit from Maricopa County Air Pollution Control prior to start of construction if the total area to be disturbed is greater than 4350 sq ft. A copy of the permit shall be provided to Luke's QA/project engineer.

1.1.4.2 Hydrocarbons and Carbon Monoxide

Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal and State allowable limits at all times.

1.1.4.3 Odors

Odors shall be controlled at all times for all construction activities, processing and preparation of materials.

1.1.4.4 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise.

1.1.5 WASTE DISPOSAL

Disposal of wastes shall be as specified in Section 02220 DEMOLITION and as specified below.

1.1.5.1 Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. Handling and disposal shall be conducted to prevent contamination. Segregation measures shall be employed

so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal.

1.1.5.2 Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 150 mm 150 mm of the top. Wastes shall be disposed of in accordance with Federal and local laws and regulations.

1.1.5.3 Hazardous Wastes

The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing and shall collect waste in suitable containers observing compatibility. The Contractor shall transport hazardous waste off Government property and dispose of it in compliance with Federal and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility.

1.1.5.4 Burning

Burning will be allowed only if permitted in other sections of the specifications or authorized in writing by the Contracting Officer. The specific time, location, and manner of burning shall be subject to approval. Fires shall be confined to a closed vessel, guarded at all times, and shall be under constant surveillance until they have burned out or have been extinguished. Burning shall be thorough reducing the materials to ashes.

1.1.6 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Existing historical, archaeological, and cultural resources within the Contractor's work area will be so designated by the Contracting Officer if any has been identified. The Contractor shall take precautions to preserve all such resources as they existed at the time they were first pointed out.

The Contractor shall provide and install protection for these resources and be responsible for their preservation during the life of the contract. If during excavation or other construction activities any previously unidentified or unanticipated resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rocks or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer.

1.1.7 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction.

1.1.8 RESTORATION OF LANDSCAPE DAMAGE

The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work areas.

1.1.9 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

1.1.10 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection. The training shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental pollution control.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 PAYMENT

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL REQUIREMENTS
- 3.2 QUALITY CONTROL PLAN
 - 3.2.1 Content of the CQC Plan
 - 3.2.2 Acceptance of Plan
 - 3.2.3 Notification of Changes
- 3.3 COORDINATION MEETING
- 3.4 QUALITY CONTROL ORGANIZATION
 - 3.4.1 Personnel Requirements
 - 3.4.2 CQC System Manager
 - 3.4.3 CQC Personnel
 - 3.4.4 Additional Requirement
 - 3.4.5 Organizational Changes
- 3.5 SUBMITTALS AND DELIVERABLES
- 3.6 CONTROL
 - 3.6.1 Preparatory Phase
 - 3.6.2 Initial Phase
 - 3.6.3 Follow-up Phase
 - 3.6.4 Additional Preparatory and Initial Phases
- 3.7 TESTS
 - 3.7.1 Testing Procedure
 - 3.7.2 Testing Laboratories
 - 3.7.2.1 Capability Check
 - 3.7.2.2 Capability Recheck
 - 3.7.3 Onsite Laboratory
 - 3.7.4 Furnishing or Transportation of Samples for Testing
- 3.8 COMPLETION INSPECTION
 - 3.8.1 Punch-Out Inspection
 - 3.8.2 Pre-Final Inspection
 - 3.8.3 Final Acceptance Inspection
- 3.9 DOCUMENTATION
- 3.10 SAMPLE FORMS
- 3.11 NOTIFICATION OF NONCOMPLIANCE

-- End of Section Table of Contents --

SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740	(1996) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM E 329	(1995b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with quality requirements specified in the contract. The project superintendent in this context shall mean the individual with the responsibility for the overall management of the project including quality and production.

3.2 QUALITY CONTROL PLAN

The Contractor shall furnish for review by the Government, not later than 30 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause

titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 60 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.
- e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)
- f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.
- h. Reporting procedures, including proposed reporting formats.
- i. A list of the definable features of work. A definable feature of

work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

3.2.2 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.3 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 7 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within

the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a graduate engineer, graduate architect, or a graduate of construction management, with a minimum of 5 years construction experience on construction similar to this contract. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: electrical, mechanical, civil, and structural. These individuals may be employees of the prime or subcontractor; be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals may perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan.

Experience Matrix

	Area	Qualifications
a.	Civil	Graduate Civil Engineer with 2 years experience in the type of work being performed on this project or technician with 5 yrs related experience
b.	Mechanical	Graduate Mechanical Engineer with 2 yrs experience or person with 5 yrs related experience
c.	Electrical	Graduate Electrical Engineer with 2 yrs related experience or person with 5 yrs related experience
d.	Structural	Graduate Structural Engineer with 2 yrs experience or person with 5 yrs related experience

3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager shall have completed the course entitled "Construction

Quality Management For Contractors". This course is periodically offered on an as needed basis for specific contracts when the proposed CQC System Manager has not previously attended the training. The Contracting Officer or Authorized Representative shall be informed at the Preconstruction Conference if this service is needed. A nominal charge will apply to cover reproduction of the required manual. The CQC System Manager may be accepted, at the Contracting Officer's discretion, conditioned upon completion of the course.

3.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and

sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.
- k. The Government shall be notified at least 48 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 48 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.7 TESTS

3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

3.7.2 Testing Laboratories

3.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$1,000 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Corps of Engineers Division Laboratory, f.o.b., at the address to be furnished by the Government.

Coordination for each specific test, exact delivery location, and dates will be made through the Resident/Area Office.

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the Special Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected.

Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.8.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or

any particular increment of the work if the project is divided into increments by separate completion dates.

3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

3.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Offsite surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.

j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.10 SAMPLE FORMS

Sample forms enclosed at the end of this section.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

[illegible]² Clock time beginning & end of indicated operation

³ Include bearing strata description, casing description, and concrete compressive strength

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

- 1.1 GENERAL REQUIREMENTS
 - 1.1.1 Site Plan
 - 1.1.2 Identification of Employees
 - 1.1.3 Employee Parking
- 1.2 AVAILABILITY AND USE OF UTILITY SERVICES
 - 1.2.1 Payment for Utility Services
 - 1.2.2 Meters and Temporary Connections
 - 1.2.3 Advance Deposit
 - 1.2.4 Final Meter Reading
 - 1.2.5 Sanitation
 - 1.2.6 Telephone
- 1.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN
 - 1.3.1 Bulletin Board
 - 1.3.2 Project and Safety Signs
- 1.4 PROTECTION AND MAINTENANCE OF TRAFFIC
 - 1.4.1 Haul Roads
 - 1.4.2 Barricades
- 1.5 CONTRACTOR'S TEMPORARY FACILITIES
 - 1.5.1 Administrative Field Offices
 - 1.5.2 Storage Area
 - 1.5.3 Supplemental Storage Area
 - 1.5.4 Appearance of Trailers
 - 1.5.5 Maintenance of Storage Area
 - 1.5.6 New Building
 - 1.5.7 Security Provisions
- 1.6 PLANT COMMUNICATION
- 1.7 TEMPORARY PROJECT SAFETY FENCING
- 1.8 CLEANUP
- 1.9 RESTORATION OF STORAGE AREA

-- End of Section Table of Contents --

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

1.1 GENERAL REQUIREMENTS

1.1.1 Site Plan

The Contractor shall prepare a site plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, the number of trailers to be used, avenues of ingress/egress to the fenced area and details of the fence installation. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired.

1.1.2 Identification of Employees

The Contractor shall be responsible for furnishing to each employee, and for requiring each employee engaged on the work to display, identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. When required, the Contractor shall obtain and provide fingerprints of persons employed on the project. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

1.1.3 Employee Parking

Contractor employees shall park privately owned vehicles in an area designated by the Contracting Officer. This area will be within reasonable walking distance of the construction site. Contractor employee parking shall not interfere with existing and established parking requirements of the military installation.

1.2 AVAILABILITY AND USE OF UTILITY SERVICES

1.2.1 Payment for Utility Services

The Government will make all reasonably required utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

1.2.2 Meters and Temporary Connections

The Contractor, at its expense and in a manner satisfactory to the Contracting Officer, shall provide and maintain necessary temporary connections, distribution lines, and meter bases (Government will provide meters) required to measure the amount of each utility used for the purpose

of determining charges. The Contractor shall notify the Contracting Officer, in writing, 5 working days before final electrical connection is desired so that a utilities contract can be established. The Government will provide a meter and make the final hot connection after inspection and approval of the Contractor's temporary wiring installation. The Contractor shall not make the final electrical connection.

1.2.3 Advance Deposit

An advance deposit for utilities consisting of an estimated month's usage or a minimum of \$50.00 will be required. The last monthly bills for the fiscal year will normally be offset by the deposit and adjustments will be billed or returned as appropriate. Services to be rendered for the next fiscal year, beginning 1 October, will require a new deposit. Notification of the due date for this deposit will be mailed to the Contractor prior to the end of the current fiscal year.

1.2.4 Final Meter Reading

Before completion of the work and final acceptance of the work by the Government, the Contractor shall notify the Contracting Officer, in writing, 5 working days before termination is desired. The Government will take a final meter reading, disconnect service, and remove the meters. The Contractor shall then remove all the temporary distribution lines, meter bases, and associated paraphernalia. The Contractor shall pay all outstanding utility bills before final acceptance of the work by the Government.

1.2.5 Sanitation

The Contractor shall provide and maintain within the construction area minimum field-type sanitary facilities approved by the Contracting Officer. Government toilet facilities will not be available to Contractor's personnel.

1.2.6 Telephone

The Contractor shall make arrangements and pay all costs for telephone facilities desired.

1.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN

1.3.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 915 by 1220 mm in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

1.3.2 Project and Safety Signs

The requirements for the signs, their content, and location shall be as shown on the drawings. The signs shall be erected within 15 days after

receipt of the notice to proceed. The data required by the safety sign shall be corrected daily, with light colored metallic or non-metallic numerals. Upon completion of the project, the signs shall be removed from the site.

1.4 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads. The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

1.4.1 Haul Roads

The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. Haul roads shall be constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, shall be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and hauling roads shall be subject to approval by the Contracting Officer. Lighting shall be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations. Upon completion of the work, haul roads designated by the Contracting Officer shall be removed.

1.4.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

1.5 CONTRACTOR'S TEMPORARY FACILITIES

1.5.1 Administrative Field Offices

The Contractor shall provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

1.5.2 Storage Area

The Contractor shall construct a temporary fence around trailers and materials. The fence shall be as indicated on drawings. Trailers, materials, or equipment shall not be placed or stored outside the fenced area unless such trailers, materials, or equipment are assigned a separate and distinct storage area by the Contracting Officer away from the vicinity of the construction site but within the military boundaries. Trailers, equipment, or materials shall not be open to public view with the exception of those items which are in support of ongoing work on any given day. Materials shall not be stockpiled outside the fence in preparation for the next day's work. Mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment, shall be parked within the fenced area at the end of each work day.

1.5.3 Supplemental Storage Area

Upon Contractor's request, the Contracting Officer will designate another or supplemental area for the Contractor's use and storage of trailers, equipment, and materials. This area may not be in close proximity of the construction site but shall be within the military boundaries. Fencing of materials or equipment will not be required at this site; however, the Contractor shall be responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area. Utilities will not be provided to this area by the Government.

1.5.4 Appearance of Trailers

Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair. Trailers which, in the opinion of the Contracting Officer, require exterior painting or maintenance will not be allowed on the military property.

1.5.5 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse, with construction equipment or other vehicles, grassed or unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation shall be at the Contractor's discretion. Grass located within the boundaries of the construction site shall be mowed for the duration of the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers shall be edged or trimmed neatly.

1.5.6 New Building

In the event a new building is constructed for the temporary project field office, it shall be a minimum 3.6 m in width, 5 m in length and have a minimum of 2.1 m headroom. It shall be equipped with approved electrical wiring, at least one double convenience outlet and the required switches and fuses to provide 110-120 volt power. It shall be provided with a work table with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The building shall be waterproof, shall be supplied with heater, shall have a minimum of two doors, electric lights, a telephone, a battery operated smoke detector alarm, a sufficient number of adjustable windows for adequate light and ventilation, and a supply of approved drinking water. Approved sanitary facilities shall be

furnished. The windows and doors shall be screened and the doors provided with dead bolt type locking devices or a padlock and heavy duty hasp bolted to the door. Door hinge pins shall be non-removable. The windows shall be arranged to open and to be securely fastened from the inside. Glass panels in windows shall be protected by bars or heavy mesh screens to prevent easy access to the building through these panels. In warm weather, air conditioning capable of maintaining the office at 50 percent relative humidity and a room temperature 11 degrees C below the outside temperature when the outside temperature is 35 degrees C, shall be furnished. Any new building erected for a temporary field office shall be maintained by the Contractor during the life of the contract and upon completion and acceptance of the work shall become the property of the Contractor and shall be removed from the site. All charges for telephone service for the temporary field office shall be borne by the Contractor, including long distance charges up to a maximum of \$75.00 per month.

1.5.7 Security Provisions

Adequate outside security lighting shall be provided at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own equipment; in addition, the Contractor shall notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office.

1.6 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

1.7 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, the Contractor shall furnish and erect temporary project safety fencing at the work site. The safety fencing shall be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 1.1 m high, supported and tightly secured to steel posts located on maximum 3 m centers, constructed at the approved location. The safety fencing shall be maintained by the Contractor during the life of the contract and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

1.8 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

1.9 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, the fence shall be removed and

CONTROL TOWER, LUKE AFB, AZ
DACA09-99-B-0014

will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

-- End of Section --